# CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, March 21, 1907.


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## CONSTRUCTION NEWS.

### PLANS AND SPECIFICATIONS ON FILE.

The following Plans (P.), Specifications (S.) and Bidding Sheets (B. S.) may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

| Bids close. | Work. | Place. | On file. | See issue |
|---|---|---|---|---|
| Mar. 22 | Officers' quarters. | Charleston, S. C. | S. | 2-21 |
| *10 | Canal, etc. | Belle Fourche, S. D. | P., S. & B. S. | 2-21 |
| *15 | Canal. | Klamath Falls, Ore. | S. & B. S. | 2-21 |
| *17 | Structures. | Huntley, Mont. | P., S. & B. S. | 2-28 |
| *28 | Coal-handling machinery. | Philadelphia, Pa. | S. & B. S. | 3-21 |
| 30 | Capstans. | Norfolk, Va. | S. | 2-21 |
| 30 | Capstans. | Charleston, S. C. | S. | 2-21 |
| *30 | Water tank & tower. | Wash., D. C. | S. | 2-28 |
| 30 | Generating set. | Portsmouth, N. H. | S. | 3- 7 |
| 30 | Quay walls. | Charleston, S. C. | S. | 3-14 |
| Apr *3 | Canal, etc. | Great Falls, Mont. | P., S. & B. S. | 2-14 |
| *13 | Buildings. | Fort Hancock, N. J. | P. & S. | 3-21 |

*Work advertised in Engineering News.

### LIST OF CONTRACTS PENDING.

#### LIGHT, HEAT AND POWER PLANTS.

| Bids close. | Work. | Place. | On file. | See issue |
|---|---|---|---|---|
| Mar. 23. | Lighting plant. | Escanaba, Mich. | Mar. | 21 |
| Mar. 27. | Lighting. | Cleveland, Ohio. | Mar. | 21 |
| Mar. 28. | Lighting Plant. | New York, N. Y. | Mar. | 21 |
| Mar. 30. | Generating set. | Portsmouth, N. H. | Mar. | 7 |
| Apr. 1. | Power plant. | Winnipeg, Man. | Mar. | 14 |
| Apr. 2. | Power plant. | Panama | Mar. | 21 |
| Apr. 4. | Conduit system. | Macon, Ga. | Mar. | 14 |
| | Advertised, Eng. News, Mar. 14 and 21. | | | |
| Apr. 4. | Conduits, etc. | Macon, Ga. | Mar. | 21 |
| Apr. 5. | Boilers, etc. | Indianapolis, Ind. | Mar. | 21 |
| Apr. 8. | Lighting system. | Clifton Forge, Va. | Mar. | 14 |
| Apr. 15. | Lighting system. | Battleford, Sask. | Mar. | 21 |
| Apr. 15. | Power plant. | Bowling Green, Ky. | Mar. | 7 |
| Apr. 30. | Conduit system. | Seattle, Wash. | Mar. | 21 |
| May 1. | Lighting. | Natchez, Miss. | Mar. | 7 |
| | Advertised, Eng. News, Mar. 7 and 14. | | | |

#### BRIDGES.

| | | | |
|---|---|---|---|
| Mar. 21. | Bridge, Jarratt, Va. | Mar. | 14 |
| Mar. 21. | Substructure, Crooksville, Ohio. | Mar. | 14 |
| Mar. 22. | Bridges, Clinton, Iowa | Mar. | 21 |
| Mar. 23. | Bridges, Chandler, Okla. | Mar. | 14 |
| Mar. 25. | Culvert, South Hero, Vt. | Mar. | 21 |
| Mar. 25. | Superstructure, Zanesville, Ohio. | Mar. | 14 |
| Mar. 26. | Bridge, Indianapolis, Ind. | Mar. | 14 |
| Mar. 26. | Spans, piers, etc., Memphis, Tenn. | Mar. | 21 |
| Mar. 27. | Bridge, etc., Paterson, N. J. | Mar. | 14 |
| | Advertised, Eng. News, Mar. 14 and 21. | | |
| Mar. 28. | Bridge, Reading, Pa. | Mar. | 14 |
| | Advertised, Eng. News, Mar. 14. | | |
| Mar. 28. | Substructure, etc., Toledo, Ohio. | Mar. | 14 |
| Mar. 28. | Bridges, Huntington, Ind. | Mar. | 21 |
| Mar. 28. | Bridge repair, Chicago, Ill. | Mar. | 21 |
| Mar. 29. | Bridge, Urbana, Ill. | Mar. | 21 |
| Mar. 30. | Bridges, Dauphin, Man. | Mar. | 21 |
| Apr. 1. | Bridges, etc., Ft. Rosecrans, Cal. | Mar. | 21 |
| Apr. 1. | Abutments and piers, St. John, N. B. | Mar. | 21 |
| Apr. 1. | Trestles, Raleigh, N. C. | Mar. | 21 |
| Apr. 1. | Bridges, Salinas, Cal. | Feb. | 21 |
| Apr. 1. | Bridge, Greenwood, Miss. | Jan. | 31 |
| Apr. 2. | Bridges, Covington, Ind. | Mar. | 21 |
| Apr. 2. | Bridges, etc., Crawfordsville, Ind. | Mar. | 14 |
| Apr. 5. | Bridges, Mitchell, S. Dak. | Mar. | 21 |
| Apr. 6. | Abutments, Cleveland, Ohio. | Mar. | 21 |
| Apr. 8. | Bridge, etc., South Bend, Ind. | Mar. | 21 |
| Apr. 8. | Trestles, etc., Louisville, Ky. | Mar. | 14 |
| | Advertised, Eng. News, Mar. 14 to Apr. 4. | | |
| Apr. 9. | Bridge, Duluth, Minn. | Mar. | 21 |
| Apr. 11. | Arch, Granville, Ohio | Mar. | 21 |
| Apr. 15. | Bridge, Denver, Colo. | Mar. | 21 |
| | Advertised, Eng. News, Mar. 21. | | |
| Apr. 25. | Bridges, Glendive, Mont. | Mar. | 14 |
| | Advertised, Eng. News, Mar. 14 to Apr. 4. | | |
| Apr. 29. | Viaduct, New Orleans, La. | Feb. | 28 |
| | Advertised, Eng. News, Feb. 28 to Apr. 11. | | |

#### BUILDINGS.

| | | | |
|---|---|---|---|
| Mar. 21. | Post-office, Owosso, Mich. | Feb. | 21 |
| | Advertised, Eng. News, Feb. 21 and 28. | | |
| Mar. 21. | City hall, Louisville, Ky. | Mar. | 14 |
| Mar. 21. | Shelter house, New York, N. Y. | Mar. | 14 |
| Mar. 23. | Officers' quarters, Charleston, S. C. | Feb. | 21 |
| Mar. 23. | Post-office, Green Bay, Wis. | Feb. | 21 |
| | Advertised, Eng. News, Feb. 21 and 28. | | |
| Mar. 28. | Elephant house, New York, N. Y. | Mar. | 14 |
| Apr. 1. | Hospital, Saskatoon, Sask. | Mar. | 21 |
| Apr. 1. | Schools, New York, N. Y. | Mar. | 21 |
| Apr. 1. | Nurses' Home, New York, N. Y. | Mar. | 21 |
| Apr. 3. | Plumbing fixtures, Washington, D. C. | Feb. | 14 |
| | Advertised Eng. News, Feb. 14 to Mar. 7. | | |
| Apr. 3. | Library, University, N. Dak. | Mar. | 7 |
| Apr. 4. | Filing cases, etc., New York, N. Y. | Mar. | 14 |
| | Advertised, Eng. News, Mar. 14 and 21. | | |
| Apr. 8. | Post-office, Denver, Colo. | Mar. | 7 |
| Apr. 9. | Court-house, Carthage, Ill. | Feb. | 28 |
| Apr. 9. | Post-office, Little Falls, N. Y. | Mar. | 7 |
| | Advertised, Eng. News, Mar. 7 and 14. | | |
| Apr. 10. | Elevator, Superior, Wis. | Mar. | 21 |
| Apr. 11. | Interior finish, New York, N. Y. | Mar. | 14 |
| Apr. 12. | Repairs, Washington, D. C. | Mar. | 14 |
| Apr. 13. | Buildings, Fort Hancock, N. J. | Mar. | 14 |
| | Advertised, Eng. News, Mar. 14 to Apr. 4. | | |
| Apr. 15. | Post-office, Tyler, Tex. | Mar. | 7 |
| | Advertised, Eng. News, Mar. 7 and 14. | | |
| Apr. 15. | Marble work, West Point, N. Y. | Mar. | 21 |
| | Advertised, Eng. News, Mar. 21 to Apr. 11. | | |
| Apr. 18. | Post-office, Flint, Mich. | Mar. | 21 |
| May 1. | Plans, Milwaukee, Wis. | Feb. | 28 |
| May 1. | Buildings, North Chicago, Ill. | Mar. | 14 |
| June 4. | State Capitol, Pierre, S. Dak. | Mar. | 7 |

#### WATER SUPPLY AND IRRIGATION.

| | | | |
|---|---|---|---|
| Mar. 21. | Ditches, Forest City, Iowa | Mar. | 14 |
| Mar. 21. | Well clusters and c.-i. pipe, Ironton, Ohio. | Mar. | 7 |
| Mar. 22. | Cisterns, Ellis, Ohio | Mar. | 7 |
| Mar. 22. | Cast-iron pipe, etc., Alma Center, Wis. | Feb. | 28 |
| Mar. 22. | Tank, engine, etc., Alma Center, Wis. | Feb. | 28 |
| Mar. 23. | Water tank and tower, Frontenac, Kan. | Mar. | 7 |
| Mar. 25. | Lead pipe, St. Paul, Minn. | Mar. | 7 |
| Mar. 26. | Water pipe, etc., Providence, R. I. | Mar. | 21 |
| Mar. 28. | Pipe and castings, Chicago, Ill. | Mar. | 21 |
| Mar. 28. | Water-works, Gibbon, Neb. | Mar. | 21 |
| Mar. 29. | Ditches, Breckenridge, Minn. | Mar. | 21 |
| Mar. 29. | Tunnel, Milwaukee, Wis. | Mar. | 21 |
| | Advertised, Eng. News, Mar. 21. | | |
| Mar. 29. | Ditch, Greenfield, Ind. | Mar. | 14 |
| Mar. 29. | Water-works, Alma Center, Wis. | Mar. | 14 |
| | Advertised, Eng. News, Mar. 14. | | |
| Mar. 30. | Water tank and tower, Washington, D. C. | Feb. | 21 |
| | Advertised, Eng. News, Feb. 21 and 28. | | |
| Apr. 2. | Mains, Crowley, La. | Feb. | 28 |
| Apr. 2. | Water-works, Guntersville, Ala. | Mar. | 21 |
| Apr. 2. | Well, Canton, Ill. | Mar. | 21 |
| | Advertised, Eng. News, Mar. 21. | | |
| Apr. 3. | Canals, etc., Great Falls, Mont. | Feb. | 14 |
| | Advertised, Eng. News, Feb. 14 to Mar. 21. | | |
| Apr. 3. | Ditches, Parker, S. Dak. | Feb. | 21 |
| Apr. 4. | Ditches, etc., Emmetsburg, Iowa | Mar. | 7 |
| Apr. 4. | Filtration plant, Yonkers, N. Y. | Mar. | 14 |
| | Advertised, Eng. News, Mar. 14. | | |
| Apr. 4. | Ditch and laterals, Albert Lea, Minn. | Mar. | 14 |
| | Advertised, Eng. News, Mar. 14 and 21. | | |
| Apr. 4. | Water-works, Austin, Pa. | Mar. | 21 |
| | Advertised, Eng. News, Mar. 21. | | |
| Apr. 5. | Ditch, Oskaloosa, Iowa | Mar. | 21 |
| Apr. 10. | Canal, etc., Wheatland, Wyo. | Mar. | 21 |
| Apr. 10. | Filter plant, Atlanta, Ga. | Mar. | 21 |
| Apr. 10. | Cast-iron pipe, etc., Atlanta, Ga. | Mar. | 14 |
| | Advertised, Eng. News, Mar. 14 and 21. | | |
| Apr. 10. | Canal, Belle Fourche, S. Dak. | Feb. | 21 |
| | Advertised, Eng. News, Feb. 21 and 28. | | |
| Apr. 15. | Canal, Portland, Ore. | Feb. | 21 |
| | Advertised, Eng. News, Feb. 21 to Mar. 14. | | |
| Apr. 15. | Carting & laying pipe, New London, Conn. | Mar. | 21 |
| Apr. 15. | Water-works, Battleford, Sask. | Mar. | 21 |
| Apr. 15. | Water-works, Billings, Mont. | Mar. | 7 |
| Apr. 16. | Water-works, McKeesport, Pa. | Mar. | 14 |
| | Advertised, Eng. News, Mar. 14. | | |
| Apr. 16. | Laying pipe, etc., Cincinnati, Ohio. | Mar. | 21 |
| Apr. 17. | Structures, Huntley, Mont. | Feb. | 28 |
| | Advertised, Eng. News, Feb. 28 to Mar. 21. | | |
| June 3. | Weil, etc., Fort Bliss, Tex. | Mar. | 21 |
| June 5. | Dike, Crawford, Neb. | Mar. | 21 |
| | Advertised, Eng. News, Mar. 21 to Apr. 11. | | |

#### SEWERAGE.

| | | | |
|---|---|---|---|
| Mar. 21. | Sewers, Polo, Ill. | Mar. | 7 |
| Mar. 23. | Sewers, Evansville, Ind. | Mar. | 14 |
| Mar. 25. | Sewer, Willmar, Minn. | Mar. | 21 |
| Mar. 25. | Boilers and Chimney, Orange, N. J. | Mar. | 7 |
| | Advertised, Eng. News, Mar. 7 and 14. | | |
| Mar. 25. | Pumping main and ejectors, Orange, N. J. | Mar. | 7 |
| | Advertised, Eng. News, Mar. 7 and 14. | | |
| Mar. 26. | Sewer, Ridley Park, Pa. | Mar. | 21 |
| Mar. 26. | Sewers, Bay City, Mich. | Mar. | 21 |
| Mar. 26. | Sewer pipe, hydrants, etc., Melrose, Mass. | Mar. | 14 |
| | Advertised, Eng. News, Mar. 14. | | |
| Mar. 29. | Sewers, Menominee, Mich. | Mar. | 21 |
| Apr. 1. | Sewers, Larned, Kan. | Mar. | 21 |
| Apr. 1. | Sewer, Perth Amboy, N. J. | Mar. | 21 |
| Apr. 1. | Sewers, New York, N. Y. | Mar. | 21 |
| Apr. 1. | Sewer mains, Westerleigh (S. I.), N. Y. | Mar. | 14 |
| | Advertised, Eng. News, Mar. 14. | | |
| Apr. 2. | Sewage disposal works, Waterbury, Conn. | Mar. | 7 |
| | Advertised, Eng. News, Mar. 7 and 14. | | |
| Apr. 2. | Sewer, Crowley, La. | Feb. | 21 |
| Apr. 2. | Sewers, etc., Shelbyville, Ky. | Mar. | 21 |
| | Advertised, Eng. News, Mar. 21. | | |
| Apr. 4. | Septic tank, Ithaca, N. Y. | Mar. | 14 |
| | Advertised, Eng. News, Mar. 14 and 21. | | |
| Apr. 5. | Tunnel, Boston, Mass. | Mar. | 14 |
| | Advertised, Eng. News, Mar. 14. | | |
| Apr. 5. | Trenches, Boston, Mass. | Mar. | 7 |
| | Advertised, Eng. News, Mar. 7. | | |
| Apr. 8. | Sewers, Oshkosh, Wis. | Mar. | 21 |
| Apr. 10. | Interceptors, etc., Baltimore, Md. | Mar. | 7 |
| | Advertised, Eng. News, Mar. 7 and 14. | | |
| Apr. 11. | Sewer, Parkersburg, W. Va. | Mar. | 14 |
| | Advertised, Eng. News, Mar. 14 and 21. | | |
| Apr. 12. | Sewers, Washington, D. C. | Mar. | 21 |
| | Advertised, Eng. News, Mar. 21 and 28. | | |

#### STREETS AND ROADS.

| | | | |
|---|---|---|---|
| Mar. 22. | Sidewalks, Louisville, Ky. | Mar. | 14 |
| Mar. 22. | Grading, etc., St. Louis, Mo. | Mar. | 14 |
| Mar. 23. | Repairing pavements, Washington, D. C. | Mar. | 7 |
| | Advertised, Eng. News, Mar. 7 and 14. | | |
| Mar. 23. | Gravel road, Terre Haute, Ind. | Mar. | 7 |
| Mar. 25. | Paving, etc., Mamaroneck, N. Y. | Mar. | 7 |
| | Advertised, Eng. News, Mar. 7 to 21. | | |
| Mar. 25. | Paving, Omaha, Neb. | Mar. | 14 |
| Mar. 25. | Paving, etc., Titusville, Pa. | Mar. | 14 |
| | Advertised, Eng. News, Mar. 14 and 21. | | |
| Mar. 25. | Macadam, etc., Westerly, R. I. | Mar. | 21 |
| Mar. 25. | Paving, Bay City, Mich. | Mar. | 21 |
| Mar. 25. | Grading, etc., Philadelphia, Pa. | Mar. | 21 |
| | Advertised, Eng. News, Mar. 21. | | |
| Mar. 26. | Paving, Columbus, Ind. | Mar. | 21 |
| Mar. 26. | Grading, etc., New York, N. Y. | Mar. | 14 |
| Mar. 26. | Roads, Pittsburg, Pa. | Mar. | 14 |
| Mar. 26. | Paving, etc., Dunkirk, N. Y. | Mar. | 14 |
| | Advertised, Eng. News, Mar. 14 and 21. | | |
| Mar. 27. | Grading, etc., New York, N. Y. | Mar. | 14 |
| Mar. 27. | Grading, etc., Hoboken, N. J. | Mar. | 14 |
| Mar. 27. | Paving, Louisville, Ky. | Mar. | 21 |
| Mar. 28. | Paving, etc., Cincinnati, Ohio | Mar. | 21 |
| Mar. 28. | Paving, etc., Osceola, Iowa | Mar. | 21 |
| Mar. 28. | Pavement, Chicago, Ill. | Mar. | 21 |
| Mar. 28. | Macadam, Xenia, Ohio | Mar. | 21 |
| Mar. 28. | Soil, New York, N. Y. | Mar. | 14 |
| Mar. 28. | Gravel, New York, N. Y. | Mar. | 14 |
| Mar. 29. | Paving, etc., Cincinnati, Ohio | Mar. | 21 |
| Mar. 29. | Paving, Menominee, Mich. | Mar. | 21 |
| Mar. 29. | Paving, etc., Hastings, Mich. | Mar. | 21 |
| Mar. 29. | Sidewalks, etc., Ft. Leavenworth, Kan. | Mar. | 21 |
| Mar. 29. | Paving, St. Clairsville, Ohio | Mar. | 21 |
| Mar. 29. | Paving, Buffalo, N. Y. | Mar. | 21 |
| Mar. 30. | Grading, etc., Cleveland, Ohio | Mar. | 14 |
| Mar. 30. | Paving, Washington, D. C. | Mar. | 7 |
| | Advertised, Eng. News, Mar. 7 and 14. | | |
| Apr. 1. | Paving, etc., Port Chester, N. Y. | Mar. | 14 |
| | Advertised, Eng. News, Mar. 14 and 21. | | |
| Apr. 1. | Grading, etc., St. Paul, Minn. | Mar. | 14 |
| Apr. 1. | Paving, etc., Cincinnati, Ohio | Mar. | 21 |
| Apr. 1. | Regulating, etc., New York, N. Y. | Mar. | 21 |
| Apr. 2. | Road, Vincennes, Ind. | Mar. | 21 |
| Apr. 2. | Roads, Covington, Ind. | Mar. | 14 |
| Apr. 3. | Grading, etc., Ottawa, Kan. | Mar. | 14 |
| Apr. 3. | Driveway, etc., Chicago, Ill. | Mar. | 7 |
| Apr. 3. | Highway, Columbus, Ohio | Mar. | 21 |
| Apr. 4. | Paving, etc., Cincinnati, Ohio | Mar. | 21 |
| Apr. 5. | Roads, Vincennes, Ind. | Mar. | 21 |
| Apr. 8. | Paving, Binghamton, N. Y. | Mar. | 21 |
| | Advertised, Eng. News, Mar. 21 to Apr. 4. | | |
| Apr. 8. | Repaving, Binghamton, N. Y. | Mar. | 21 |
| | Advertised, Eng. News, Mar. 21 to Apr. 4. | | |
| Apr. 8. | Paving, etc., Cincinnati, Ohio | Mar. | 21 |
| Apr. 8. | Grading, etc., Oshkosh, Wis. | Mar. | 21 |
| Apr. 17. | Paving, etc., Ashland, Ky. | Mar. | 21 |
| | Advertised, Eng. News, Mar. 21 to Apr. 4. | | |

#### MISCELLANEOUS CONTRACTS.

| | | | |
|---|---|---|---|
| Mar. 21. | Bulkhead, New York, N. Y. | Mar. | 7 |
| Mar. 22. | Dredging, Chicago, Ill. | Feb. | 21 |
| | Advertised, Eng. News, Feb. 21 to Mar. 14. | | |
| Mar. 22. | Steel wall lockers, West Point, N. Y. | Feb. | 21 |
| | Advertised, Eng. News, Feb. 21 to Mar. 14. | | |
| Mar. 22. | Lock and dam, etc., Cincinnati, Ohio. | Feb. | 21 |
| | Advertised, Eng. News, Feb. 21 to Mar. 14. | | |
| Mar. 22. | Sprinkler, etc., St. Boniface, Man. | Mar. | 14 |
| Mar. 25. | Dredging, Jacksonville, Fla. | Feb. | 28 |
| | Advertised, Eng. News, Feb. 28 to Mar. 21. | | |
| Mar. 25. | Telephone cable, Western Australia (Foreign) | Feb. | 28 |
| Mar. 26. | Engineering supplies, Panama | Mar. | 14 |
| At once. | Grading, team work, New York, N. Y. | Mar. | 21 |
| | Advertised, Eng. News, Mar. 21 and 28. | | |
| Mar. 26. | Naval supplies, Washington, D. C. | Mar. | 21 |
| Mar. 27. | Dredging, New Orleans, La. | Jan. | 24 |
| | Advertised, Eng. News, Jan. 24 and 31. | | |
| Mar. 27. | Cable, fire alarm boxes, New York, N. Y. | Mar. | 21 |
| Mar. 27. | Railway, Belgium (Foreign) | Mar. | 21 |
| Mar. 27. | Inspector Textile Fabrics, Wash., D. C. | Mar. | 14 |
| Mar. 27. | Elec. Engr. & Draftsman, Wash., D. C. | Mar. | 14 |
| Mar. 28. | Dredging, Detroit, Mich. | Mar. | 21 |
| Mar. 28. | Mooring stones, Portland, Me. | Mar. | 21 |
| Mar. 28. | Coal-handling machinery, Philadelphia, Pa. | Mar. | 21 |
| | Advertised, Eng. News, Mar. 21. | | |
| Mar. 28. | Canal, Boston, Mass. | Feb. | 14 |
| | Advertised, Eng. News, Feb. 14 to 28. | | |
| Mar. 28. | Greenhouse, New York, N. Y. | Mar. | 14 |
| Mar. 30. | Dredging, Washington, D. C. | Mar. | 14 |
| Mar. 30. | Quay walls, Charleston, S. C. | Mar. | 14 |
| Mar. 30. | Capstans, Charleston, S. C. | Feb. | 21 |
| Mar. 30. | Capstans, Norfolk, Va. | Feb. | 21 |
| Mar. 30. | Timber land, Scranton, Miss. | Feb. | 28 |
| | Advertised, Eng. News, Feb. 28 to Mar. 21. | | |
| Mar. 30. | Dredging plant, Cincinnati, Ohio. | Mar. | 7 |
| | Advertised, Eng. News, Mar. 7 to Mar. 28. | | |
| Apr. 2. | Reclamation work, British India (Foreign). | Jan. | 17 |
| Apr. 2. | Sprinkling, New Brighton, N. Y. | Mar. | 21 |
| Apr. 3. | Cement, Wheeling, W. Va. | Mar. | 7 |
| | Advertised, Eng. News, Mar. 7 to Mar. 28. | | |
| Apr. 4. | Repairing pier, Grand Rapids, Mich. | Mar. | 7 |
| | Advertised, Eng. News, Mar. 7 to Mar. 28. | | |
| Apr. 5. | Drain, Algona, Iowa | Feb. | 28 |
| Apr. 5. | Crib and riprap, Cincinnati, Ohio | Mar. | 14 |
| | Advertised, Eng. News, Mar. 14 to 28. | | |
| Apr. 11. | Cement, Brandon, Man. | Feb. | 14 |
| | Advertised, Eng. News, Feb. 14 to Mar. 7. | | |
| Apr. 12. | Ditches, Brookings, S. Dak. | Oct. | 13 |
| May 2. | Dredging, Des Moines, Iowa | Mar. | 14 |
| July 1. | Tunnel, New Zealand (Foreign) | Sept. | 13 |
| | Advertised, Eng. News, Sept. 13 to Mar. 14. | | |

#### CIVIL SERVICE EXAMINATIONS.

| | | | |
|---|---|---|---|
| Apr. 2. | Structural Steel Dftsman, New York, N. Y. | Mar. | 14 |
| Apr. 2. | Dredging, Washington, D. C. | Mar. | 21 |
| Apr. 2. | Broken stone, Windsor, Ont. | Mar. | 21 |
| Apr. 2. | Engineering supplies, Panama | Mar. | 21 |
| Apr. 3. | C. E. Students, Washington, D. C. | Mar. | 14 |
| Apr. 4. | Assistant Engr., New York, N. Y. | Mar. | 14 |
| | Advertised, Eng. News, Mar. 14 to 28. | | |
| Apr. 4. | Tug, Washington, D. C. | Mar. | 21 |
| Apr. 4. | Tunnel, Boston, Mass. | Mar. | 21 |
| | Advertised, Eng. News, Mar. 21 and 28. | | |
| Apr. 6. | Sidewalks, Monuments, Fort Worth, Tex. | Mar. | 21 |
| | Advertised, Eng. News, Mar. 21 and 28. | | |
| Apr. 8. | Pile dock, New York, N. Y. | Mar. | 21 |
| | Advertised, Eng. News, Mar. 21 and 28. | | |
| Apr. 11. | Subway, New York, N. Y. | Mar. | 21 |
| Apr. 11. | Wharf, Charlottetown, P. E. I. | Mar. | 21 |
| Apr. 13. | Chess wagons, Washington, D. C. | Mar. | 21 |
| | Advertised, Eng. News, Mar. 21 to Apr. 4. | | |
| Apr. 15. | Cement, Montrose, Colo. | Mar. | 21 |
| | Advertised, Eng. News, Mar. 21 to Apr. 11. | | |
| Apr. 15. | Bear-trap gates, Wheeling, W. Va. | Mar. | 21 |
| | Advertised, Eng. News, Mar. 21 to Apr. 11. | | |
| Apr. 22. | Tunnels, approaches, bridge substructures, Long Island City, N. Y. | Mar. | 21 |
| | Advertised, Eng. News, Mar. 21. | | |
| Apr. 24. | Removing garbage, etc., Schenectady, N. Y. | Mar. | 21 |
| | Advertised, Eng. News, Mar. 21. | | |
| May 8. | Assistant Engr., New York, N. Y. | Mar. | 21 |
| | Advertised, Eng. News, Mar. 21 to Apr. 18. | | |
| May 29. | Topograph Draftsman, New York, N. Y. | Mar. | 21 |
| | Advertised, Eng. News, Mar. 21 to May 9. | | |

## RAILWAYS.

*The names of parties awarded contracts are printed in capital letters.*

ALASKA CENTRAL.—The contract for building 25 miles of this road from milepost 50 to Girdwood, Alaska, has been awarded to SNOW & WATSON. J. B. Cameron is Engr.-of-Construction, Seward, Alaska.

ATLANTIC, NORTHERN & SOUTHERN.—H. S. Rattenborg, Gen. Mgr., Atlantic, Iowa, informs us, under date of March 15, that company probably will be ready to let contracts for construction in about 30 days. Surveys are partly made and right-of-way is being secured. As noted on Feb. 14, this company proposes to build a railroad from Manning, south via Atlantic to Villisca, Iowa, about 75 miles. Subscriptions exceeding $100,000 have been raised at Atlantic, Elkhorn and Kimballton. The headquarters of the company are at Atlantic, Iowa. The officers are: Pres., J. A. McWaid; Vice-Pres., F. M. Nebee; Secy., James Stiers; Treas., E. E. Marquis. Construction is expected to be started before summer. The first section to be built will be between Kimballton and Atlantic, 18 miles.

BANGOR & AROOSTOOK.—A. E. TRITES, of Bangor, Me., has been awarded the contract for building a second track from Northern Maine Junction to La Grange, Me., 30 miles. He also has the contract for a cut-off from La Grange to a point four miles south of West Seboois, a distance of 28 miles. Moses Burpee is Ch. Engr., Houlton, Me.

BENNETTSVILLE & CHERAW.—J. J. Heckart, Pres., Bennettsville, S. C., states that the company proposes to build an extension 25 miles long from Bennettsville to Blenheim, Drake and Brownsville. Work is to start within 30 days and will be done by the company. The present roadbed, 14 miles long from Kollocks to Bennettsville, will be improved. Noted last week.

BOSTON & MAINE.—Radical changes are proposed by this company in its line from Johnsonville to Troy, N. Y., 16 miles. Plans of the proposed improvements have been filed with the State Railroad Commission at Albany. A hearing on the application was set for March 22. The changes are made as a result of the investigation of the cause of the fatal wreck at Upper Troy, Oct. 4, 1906. The changes embody the recommendation made by the State Board. The railroad company proposes to double-track its road from Johnsonville to Troy and to abolish all grade crossings on the line to be double-tracked. The municipalities affected are the towns of Pittstown, Schaghticoke, village of Valley Falls and the city of Troy. H. Bissell is Ch. Engr., Boston. Noted last week.

CHICAGO, MILWAUKEE & ST. PAUL.—Contract for 25 miles of grading across the Coeur d'Alene reservation has been awarded to MORSE, GOULD & MEARS, of Hood River, Ore. Contract includes a 2,500-ft. tunnel near Watts.

CORBIN & NASHVILLE.—The Louisville, Ky., "Times" states that this company has awarded contract to PETER & CO., of Louisville, to finance and build the first section of the new railroad from Corbin, Ky., into Tennessee, the first section to begin at Tateville, a few miles south of Somerset, and run to Monticello. This line will be about 25 miles in length and will penetrate one of the richest mineral and timber sections of that part of the state.

DELAWARE & HUDSON.—Company has received a loan of $6,000,000 to extend its line from Sorel to Quebec, Que., approximately 140 miles.

ELK VALLEY & ONEIDA.—Company has been chartered with $50,000 capital, to build a line from Elk Valley in Campbell County, Tenn., to Oneida, in Scott County. The incorporators are H. C. Lindsay, R. S. Young, C. H. Smith, R. N. Kesterson and J. O. Smith.

GUYAN, BIG UGLY & COAL RIVER.—This company has been organized to build a railway from the mouth of Big Ugly Creek in Lincoln County, W. Va., to a point on Laurel Fork. Capital stock, $100,000. Incorporators: J. W. Johnson, Mary A. Sims, H. T. Lovett, Paul W. Scott and Mary E. May.

KANSAS CITY SOUTHERN.—L. F. Loree, Chn. of Executive Com., is reported as saying that $12,000,000 will be expended for betterments, of which $5,000,000 will be expended this year. This work will include reduction of grades, building of new tracks and other improvements. A. F. Rust is Ch. Engr., at Kansas City, Mo.

LAKE CHARLES & NORTHERN.—The contract for building 22 miles of this road from Lake Charles to Fulton, La., has been awarded to CALLAGHAN & GRAHAM, of Beaumont, Tex. The road is projected from Lake Charles to Shreveport. G. S. Nott, of New Orleans, La., is Pres., and E. B. Cushing, of New Orleans, is Vice-Pres. Mr. Cushing is Gen. Supt. of the Louisiana lines of the Southern Pacific. It is stated that a $900,000 bridge is to be built across the Calcasieu River, three miles north of Lake Charles.

LEHIGH & LAKE ERIE.—Authority has been granted this company by the New York State Board of Railroad Commissioners to issue a first mortgage for $3,000,000, to be used to complete the construction and equipment of the road and the purchase of terminal property. The road, which is ten miles long, is located in Erie County.

LEXINGTON & EASTERN.—W. A. McDowell, Gen. Mgr., Lexington, Ky., advises us that report that company will build an extension is erroneous. Company may add about three miles to its line this year for the accommodation of a lumber company.

LINCOLN NORTHERN.—Articles of incorporation have been filed in California for a new railway in Placer County under the control of the Southern Pacific. The company which is to control the road is known as the Lincoln Northern Railway Co., and the projected line, eleven miles in length, will run from Lincoln Station on the line of the Central Pacific to the Dairy Farm mine. The capital stock is $250,000, of which $11,200 has been subscribed. The incorporators are: E. E. Calvin, William F. Herrin, William Hood, N. T. Smith and J. L. Willcutt, of San Francisco.

LOUISIANA.—The New Iberia, La., Police Jury has appointed a committee, consisting of Leon M. Lemaire, A. B. Romero and A. Goula, on the proposition to build a railroad about 35 miles long from New Iberia via St. Martinsville, Breaux, Bridge and Arnaudville, to Port Barre, on the Texas & Pacific Railway. The City Council has also appointed a committee composed of George W. Dallas, O. Renoudet and L. Lemaire, and the Board of Trade has named P. R. Burke, J. W. Eckart, Jules Dreyfus, H. L. Smith, E. T. Weeks, Charles Goughenheim, R. S. McMahon and M. W. Fisher. These committees are to hold a joint meeting.

MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE.—Contract has been awarded to FOLEY BROS., of St. Paul, Minn., for the construction of a new line to Duluth. The new road is to run from Brooten, Minn., to Superior and thence to Duluth, about 200 miles. The road will cross the Great Northern and Northern Pacific roads at Freeport, Royalton and other points. It will open up a great territory. It is estimated that, counting terminals at Duluth and Superior, the line will cost about $8,000,000.

PENNSYLVANIA, NEW YORK & LONG ISLAND R. R.—For construction of tunnels and approaches and bridge substructures in Long Island City, see under Miscellaneous Contracts.

SOUTH & WESTERN.—CARPENTER & BOXLEY, of Knoxville, Tenn., have been awarded contract for a line from Hill Station, Va., to Guest River, 30 miles.

ST. ELMO, SPRINGFIELD & NORTHERN.—P. M. Johnston, St. Elmo, Ill., states that this company proposes to build a steam railroad from St. Elmo to Gerard, Ill., 56 miles, and that surveys have been commenced. It is expected to begin construction within 90 days.

ST. LOUIS, SPRINGFIELD & OKLAHOMA WESTERN.—We are officially advised that this company will let construction contracts about May 1. Its line will extend from Sallisaw, Ind. T., to South McAlester, Lehigh, Scullin, Ind. T., and Lawton, Okla., 250 miles. Survey has not been run yet. Right-of-way and capital are being secured. G. S. Stocker, Stigler, Ind. T., is Pres.; A. D. Goodenough is Gen. Mgr., Sulphur, Ind. T. Noted on March 7.

ST. MARY'S & WESTERN ONTARIO.—We are officially advised that contract has been awarded to JOHN E. WEBB, of Toronto, Ont., for building between St. Mary's and Woodstock, 20 miles. J. G. Macklin, Ch. Engr., St. Mary's, Ont. Noted on Feb. 14.

TACOMA EASTERN.—E. D. Fletcher, Ch. Engr., Tacoma, Wash., states surveys have been made for an extension from Tilton, Wash., east 20 miles. John Bagley is Vice-Pres. and Gen. Mgr., Tacoma.

TAMPA & JACKSONVILLE.—This line is being built by the AMERICAN CONSTRUCTION CO. from Jacksonville to Tampa, Fla., 186 miles. The route has been surveyed from Jacksonville to York, 100 miles, and is under survey from York to Tampa, 86 miles. The line runs via Kingsley Lake, Starke, Gainesville, Micanopy, Fairfield, York and Lecanto. Grading is completed from Fairfield to York, five miles, and work is in progress from York south five miles. The contractors for the present work are H. GANTO, R. CHEESEBORO, E. L. ANDERSON and W. H. JONES. Contracts for the work between Gainesville and Jacksonville and between York and Tampa will be let at Gainesville on April 2. C. N. Atkinson is Pres., Jacksonville, Fla.; Dennis Polk, Ch. Engr.; Isaac Smith, Assistant Locating Engr.; E. Wallace, Resident Engr., all with headquarters at Gainesville.

TEKOA & ST. MARIES.—Incorporated in Washington to build a railroad from Tekoa, Wash., to a point at or near the St. Maries River in Kootenai County or Shoshone County, Idaho, a distance of 50 miles. Capital stock, $500,000. Incorporators: F. J. Mahoney, W. A. Mosier, T. H. Follett, E. C. Dowel, William Hoare. Principal office, Tekoa, Wash.

WESTERN PACIFIC.—Virgil G. Bogue, Vice-Pres. and Ch. Engr., San Francisco, announces that all of the work in California and Utah and 100 miles of line in Nevada are under contract and that contracts are to be let immediately for the remaining 327 miles in Nevada, extending from the California state line to Deeth, Nev. The distance from Salt Lake City to San Francisco is 929 miles, and 122 miles are in Utah and 380 miles in California. The route from Salt Lake City west is via Wells, Humboldt River, Winnemucca and Smoke Creek desert, Nev., and Beckwith Pass, Feather River, Oroville, Marysville, Sacramento, Stockton and Niles, Cal. The UTAH CONSTRUCTION CO., of Ogden, Utah, has the contract for the line from Salt Lake City to Deeth, Nev., 222 miles, and from Oroville, Cal., to the Nevada state line. The E. B. & A. L. STONE CO., of Oakland, Cal., has the contract for the work from Oakland to Oroville, Cal. The maximum grade is 1%; maximum curvature, 10°; weight of rail, 85 lbs.

## ELECTRIC RAILWAYS.

*The names of parties awarded contracts are printed in capital letters.*

GREENFIELD, MASS.—A committee consisting of C. H. Webster and F. W. Williams, of Northfield, J. W. Chapin and E. E. Benjamin, of Bernardston, Mass.; J. W. Stevens and A. D. Flower, of Greenfield, has been appointed to secure funds for a preliminary survey for an electric railway which is proposed to be built from Greenfield to Northfield, 13 miles. Estimated cost is $300,000.

SYRACUSE, N. Y.—The Syracuse & South Bay Electric Railroad Co., of Syracuse, has been incorporated to operate a street surface road from Syracuse to South Bay, or Oneida Lake, a distance of eleven miles. Capital, $1,500,000. Directors, A. K. Hiscock, W. Nottingham, C. A. Lux, all of Syracuse.

MINEOLA, N. Y.—At the meeting of the Nassau County Board of Supervisors on March 12, Van Vechten Veeder, Attorney for the New York & Long Island Traction Co., notified the board of an intention to apply for a franchise to build a road from Mineola to Roslyn and thence to Port Washington, over a route which practically parallels the route proposed in the application of the Mineola, Roslyn & Fort Washington Traction Co., which is now before the board.

BUFFALO, N. Y.—The State Board of Railroad Commissioners has approved of an increase of the capital stock of the Buffalo & Lake Erie Traction Co. so that this company can buy the Jamestown, Chautauqua & Lake Erie Railway Co. The capital stock was limited to $6,750,000. The board approved of an increase to $7,500,000. The company at present controls franchises permitting it to operate an electric railroad from Buffalo to Erie, Pa.

KENNETT SQUARE, PA.—J. Walter Taylor, Pres. of the Kennett & Coatesville Ry. Co., Kennett Square, advises us that contract for building its line has been let to GEORGE H. DODGE, of Kennett Square, who also is the chief engineer. The line will be twelve miles long, as noted on Feb. 21. Surveys are partly made and right-of-way is partly obtained. Capital is being secured. Mr. Dodge informs us that he will sublet contracts for all materials, six combination passenger cars, one express car, electric locomotive, four freight cars, 1,200-HP. boilers, 800-KW. power-house equipment. The line will be built to handle heavy freight and express, as well as passenger traffic. The railway will run from Kennett to London Grove, Doe Run and Coatesville.

YORK, PA.—It is reported that an officer of the York County Traction Co. has announced that $10,000,000 will be spent in [illegible]ley improvements and extensions in this city and county within the next three years, and that lines will be built within that time to Hanover, to Harrisburg, to Lancaster and to Baltimore. David Young, Jr., is Gen. Mgr. and Pur. Agt., at York.

MASONTOWN, PA.—The Brownsville, Masontown & Smithfield Street Railways Co. has secured its charter, filed its bond with the Council of Masontown and has started work on the line between the town of Masontown and West Masontown, a distance of about three miles, it is reported. The officers of the company are: W. J. Sheldon, Pres.; M. H. Cloud, M. D., of Masontown, Vice-Pres.; C. V. Kennedy, Pittsburg, Secy.; W. H. Graham, of Masontown, Treas. A subsidiary concern, to be called the Masontown Electric Co. has been organized, the object being to manufacture and furnish electricity for lighting, heat and power in Fayette County, Pa. E. L. Schmidt is Ch. Engr. and C. A. Smith is Supt. of Construction. The main office is in Masontown, and the secretary and auditor will have offices in the House Bldg., Pittsburg.

BRUNSWICK, GA.—Joseph M. Roman, of Atlanta, Ga., has submitted a proposition to the City Council to construct an electric railway and electric light and power plant. If granted a franchise the company will commence construction within 120 days and have in operation at least five miles of street railway within twelve months from the date of the approval of the franchise. R. E. Biresewick, of Brunswick, Ga., is interested in the project.

DALTON, GA.—The Board of Trade of Dalton has secured the necessary right-of-way for the Georgia-Tennessee Interurban Electric Railway Co., which is to build an electric line from Chattanooga, Tenn., to Spring Place, Ga. The right-of-way has been secured over the surveys of the Dalton & Alaculsey railway. S. W. Divine, of Chattanooga, promoter of the road, says work will being early in April.

TAMPA, FLA.—The Hillsboro County Commissioners have granted a franchise for an electric railway from Tampa to St. Petersburg and Clearwater, 30 miles. J. Craig Phillips, James N. Holmes and C. B. Ware are interested. Work is to begin immediately.

HATTIESBURG, MISS.—We are officially advised that the Hattiesburg Traction Co., which has postponed date for opening bids for machinery, material and labor necessary for building complete street railway, from Feb. 14 to March 6, has postponed letting of contracts indefinitely. Edward J. O'Beirne is Engr., 821 Empire Bldg., Atlanta, Ga. Noted on Feb. 21.

COVINGTON, TENN.—Survey, plans, etc., for the proposed Memphis, Covington & Northern Railway have been completed by the W. K. Palmer Co., Dwight Bldg., Kansas City, Mo. Road is to be 39 miles long, extending from Memphis to Covington and beyond, and is to be part of a system of interurban lines around Memphis. Contracts will be awarded when financial arrangements are completed.

DOYLESTOWN, OHIO.—The Orville, Doylestown & Barberton Railway Co., of this place, has been incorporated by James Meech, John W. Zimmerman, A. E. Stepfield, George Landis and John W. Hartel, all of Doylestown, for the purpose of building an interurban line from Barberton to Orrville, through Marshallville, Hametown and Doylestown. The road will be built upon a private right-of-way. The road will probably be operated with gasoline-electric motors.

CLEVELAND, OHIO.—The Cleveland, Southwestern & Columbus Railroad Co., of Cleveland, with a capital stock of $10,000,000, will take over the Cleveland & Southwestern Traction, the Cleveland, Ashland & Mansfield, and the Ohio Central Traction properties, with a combined mileage of 207 miles. Of the capital stock of the new company $7,500,000 will [illegible] common and $2,500,000 will be 5% preferred. F. T. Pomeroy is Pres., Cleveland.

RICHMOND, IND.—Of the $[illegible],000 capital stock of the Indiana & [illegible] Traction Co., which is to be built from Richmond to Hamilton, Ohio, and will enter Hamilton over tracks of the Cincinnati & Northern Traction Co., about $85,000 has been subscribed. This announcement has been made by A. C. Lindemuth, Atty., of this city, who is one of the principal promoters of the road.

INDIANAPOLIS, IND.—The Fort Wayne & Celina Traction Co. has filed articles of incorporation with the Secretary of State. The capital stock is $50,000 and the company will build and operate an electric railway from Bluffton, Ind., to Celina, Ohio. A. W. Brown, L. C. Justus, Samuel Bender and R. F. Cummings are incorporators.

GRAND RAPIDS, WIS.—The Wisconsin Valley Electric Railway Co. has been incorporated with a capital stock of $25,000, has been authorized to operate an interurban line from Grand Rapids to Stevens Point. Company also contemplates extending the system to Wausau and Merrill. The incorporators are George P. Whiting, of Neenah, and A. A. Whitcomb and George Lines, of Menasha.

CEDAR RAPIDS, IOWA.—The Cedar Rapids & Iowa City Ry. Co. contemplates an increase of capital stock for improvements to its plant, at an estimated cost of $100,000, it is reported. W. G. Iowa is Pres. and Gen. Mgr.

DAVENPORT, IOWA.—The Davenport & Burlington Interurban Co. has been incorporated with capital stock of $[illegible]. The officers are: Pres., C. G. [illegible]well, Vice-Pres., Thomas Dougherty; Secy. and Treas., A. E. Carroll. The line will connect Davenport, Muscatine and Burlington. Articles of incorporation were also filed by the C. G. Hipwell Construction Co., with a capital stock of $250,000. The officers are the same as in the interurban company, and the directors are the three officers in each instance.

DENVER, COLO.—The Wheatenburg & Western Railway Co. has been incorporated. The company is capitalized at $[illegible],000, and the incorporators are: E. W. Griffith, L. E. Rowland, F. E. Guy, George C. Barnard and F. J. Jackson, all of Denver. The object of the company is to build an electric railway connecting various points in Huerfano, Costilla and Saguache counties, in the southern and southwestern part of this state.

NORTH YAKIMA, WASH.—G. M. Kenly, Ch. Engr. of the Yakima Inter-Valley Traction Co., North Yakima, Wash., advises us that this company will let contracts this spring for building its proposed line which will connect outlying districts with North Yakima. It will be about 60 miles long. Surveys for 40 miles have been made. Right-of-way is obtained and capital partly secured. H. B. Scudder is Pres., North Yakima.

HALIFAX, N. S.—The Halifax & Suburban Electric Co. has decided to build an electric tramway from Halifax, through Rockingham and Bedford, to Waverly. The company has elected directors, among them Hon. William Chisholm, George E. Boak and M. E. Keefe, of Halifax.

WINNIPEG, MAN.—The Winnipeg Lakes Electric Railroad Co. has received an extension of a year during which to commence construction. It is the intention of the company to build electric lines from Winnipeg to Lakes Manitoba and Winnipeg; also to Portage la Prairie. The capital of the company has also been increased from $50,000 to $5,000,000. T. G. Haig, Winnipeg, is promoting the company.

## LIGHT AND POWER PLANTS.

*The names of parties awarded contracts are printed in capital letters.*

LOWELL, MASS.—The Hamilton Mfg. Co., Jackson St., Lowell, will build a new power-house and coal pocket on a site bounded by Jackson, Bowditch, Middlesex and Webster Sts., within a month, it is reported. The new buildings will cost $150,000.

BALTIC, CONN.—We are officially advised that contracts for electrical apparatus only have been let by the Lucas Power Co. for its proposed plant on the Shetucket River. The contracts for water wheels, dam and power-house are still open. The plant will be located about three miles north of Baltic. The deep snow has prevented the engineers from completing surveys, plans and specifications. John D. Hall is Secy., Norwich, Conn.; F. P. Sheldon & Co., Industrial Trust Co. Bldg., Providence, R. I., are Cons. Engrs.

NEW YORK, N. Y.—Bids are asked until 11 a. m., March 28, by John V. Cogger, Comr. of Correction, for installation of a complete electric lighting plant covering all buildings comprising the Workhouse, Blackwell's Island.

VINELAND, N. J.—Plans have been completed by G. E. Poole, State Arch., Trenton, N. J., for a central heating plant to be constructed at the Soldiers' and Sailors' Home. The building will be of brick construction, one story.

LINDALE (Welkert post-office), PA.—Joseph M. Woods and James Woods, of Huntingdon, and Wallace Wilson, of Alexandria, it is reported, are securing extensive water rights in this part of the State. They have obtained the leases necessary to enable them to construct a power plant on Penn's Creek, in the neighborhood of Lindale. It is proposed to build a dam below Lindale, from Little to White Mountain, entirely closing up the gorge.

EASTON, PA.—The Hudson Electric Power Co. is negotiating for the right-of-way along the Delaware River on the Pennsylvania side in Northampton County from a point above the new Belvidere-Delaware bridge as far south as opposite Rocksburg Station on the Pennsylvania R. R., a distance of four miles, and will construct a canal or waterway the entire distance. A power-house will be built

near the river opposite the station, and electrical power generated for manufacturing and other purposes. It is reported that the Alpha Cement Co., at Martins Creek, is interested. It is proposed to tap the Delaware River at a point near the old Dent tavern, south of Riverton. This will give a fall of 25 ft. from that point to the power-house. The company may change plans and go still further up the stream to strike the Buttermilk Falls. This would give the fall 12 ft. As soon as the right-of-way is obtained the work of digging the waterway will be begun.

SUSQUEHANNA, PA.—The Erie R. R. Co. will install an electric plant at Susquehanna for its lighting and power purposes. R. A. Van Houten is Div. Engr., and H. H. Harrington is Div. Master Mechanic, both at Susquehanna.

BALTIMORE, MD.—The Sisters of Charity, 502 Mount St., have awarded contract to JOHN WATERS, 23 East Centre St., for erection of proposed one-story concrete power-house and two-story laundry building and three-story living building in connection with St. Vincent de Paul's Orphanage. Structures will cover a site 36 × 138 ft. on Etting St., between Lafayette Ave. and McMechen St., and cost about $35,000.

WASHINGTON, D. C.—Bids were opened March 7 at the Department of Agriculture, Washington, D. C., for a power-house building and equipment for the Department of Agriculture. Building Committee: B. T. Galloway, A. C. True and Gifford Pinchot; John Stephen Sewell, Superv. Engr. The following were the bids on the building: W. E. Mooney, Washington, $29,795; Fissell & Wagner, Home Life Bldg., Washington, $26,202; W. E. Speir, 1329 New York Ave., Washington, D. C., $31,170; Ambrose B. Stannard, St. James Bldg., New York, $25,953; Boyer & Smith, Washington, $33,954; Brennan Construction Co., 3056 K St., N. W., Washington, $28,174; Chas. J. Cassidy, Washington, $28,362; Pavarini & Wyne, Munsey Bldg., Washington, $27,977; Jones & Peters, Washington, $36,413; Henry Smith & Sons Co., Mount Royal Ave. and Lanvale St., Baltimore, $28,800; Standard Engineering Corporation, Philadelphia, $31,531; Cramp & Co., Commonwealth Bldg., Philadelphia, $28,997.

The following were the bids on the power plant equipment: (a) plant complete with steam turbines; (b) same with engines in lieu of steam turbines; (c) and (d) same as (a) and (b), except that turbines and engines of a different type are to be used: Biggs Heating Co., Washington, (a) $90,502, (b) $89,752, (d) $92,417; C. L. De Muralt, New York, (a) $92,500; (b) $89,850, (d) $92,640; Johnson & Livingston, New York, (a) $88,871, (b) $86,920, (d) $88,925; Henry F. Murphy & Co., 25 North Seventh St., Philadelphia, (a) $89,627, (b) $92,492, (c) $92,497, (d) $94,692; S. Faith & Co., 2427 Pennsylvania Ave., Philadelphia, Pa., (a) $78,000, (b) $80,481, (c) $79,650, (d) $83,471; Lynch & Woodward, 26 Beach St., Boston, Mass., (a) $82,767, (b) $79,786, (d) $84,946; Hanley-Casey Co., 35 East Ohio St., Chicago, Ill., (a) $81,785, (b) $80,785, (d) $82,785; Thomas & Smith, 17 South Carpenter St., Chicago, Ill., (a) $97,182, (b) $90,861, (d) $82,962; C. H. Sanborn, Boston, Mass., (a) $95,675, (b) $95,675, (c) $96,375, (d) $98,000; D'Olier Engineering Co., 121 South Eleventh St., Philadelphia, (a) $92,360, (b) $91,210, (d) $94,260; Standard Engineering Corporation, Philadelphia, (a) $83,810, (b) $86,478, (d) $89,298.

FRANKLIN CITY, VA.—Arthur L. Osgood, the Bourse, Philadelphia, Pa., writes us that plans are not yet complete for construction of electric lighting plant at Franklin City. Estimated cost of proposed plant, $35,000.

FAYETTEVILLE, N. C.—The James D. Lalor Engineering Co., Munsey Bldg., Washington, D. C., is reported to be preparing plans for power plant to be constructed by the Fayetteville Railway & Power Co. The power-house will be of brick and steel construction.

FORT LAWN, S. C.—The S. MORGAN SMITH CO., of York, Pa., has been awarded the contract for a portion of the water-wheel installation at the Rocky Creek station by the Southern Power Co. for approximately $120,000. The Rocky Creek station is located just below the Great Falls station, on the Catawba River, near Fort Lawn, S. C. The machinery contracted for will furnish 30,000 HP.

MACON, GA.—Bids are asked until April 4 by James Knox Taylor, Superv. Arch., Washington, D. C., for installing a conduit and wiring system in the enlargement of the U. S. court-house, post-office, etc., at Macon.

MACON, GA.—It is reported that the Bibb Power Co., Grand Bldg., Macon, has completed organization with W. J. Massee, Pres.; J. C. Walker, of Marshallville, Ga., Vice-Pres.; John T. Moore, Treas.; M. F. Hatcher, Secy., and Charles F. Howe, of Milledgeville, Ga., Ch. Engr. The company proposes to develop water powers on the Flint, Oconee and Ocmulgee Rivers, obtaining about 50,000 HP. for transmission by electricity, supplying power to manufacturing enterprises, operating interurban railway, in which the stockholders of the power company are interested, etc. Lockwood, Greene & Co., 93 Federal St., Boston, Mass., have been engaged to prepare plans and specifications.

POPLARVILLE, MISS.—W. P. CRAFT, of Ellisville, Miss., has been awarded the contract for erecting the power plant to be used for the water-works and electric light plant.

CUMBERLAND FALLS, KY.—We are officially advised that specifications for plant of the Cumberland Falls Water Power Syndicate will not be complete until about the middle of April. Arthur Giesler, 29 Broadway, New York, is Consult. Engr.

CLEVELAND, OHIO.—Bids are asked until 11 a. m., March 27, by the Board of County Commissioners for furnishing natural or artificial gas for lighting the county building; also for furnishing electric current for arc and incandescent lamps in same building. Julius C. Dorn is Clk., Cleveland.

CINCINNATI, OHIO.—The Union Gas & Electric Co. is preparing to erect its new electric power plant between Tennyson and Congress Sts. and Kellogg Ave. and the Ohio River. The site secured for that purpose is 1,100 × 700 ft., and contains only a few houses, which will be dismantled to make room for the structure. The plant will be equipped with machinery and devices for making and transmitting electrical power. This building will be used for the creation of electric power only. The cost of this plant will be $1,500,000. The machinery will be operated by turbine engines. Coal will be handled automatically from barges to boilers and ashes and debris disposed of in the same manner. The river front then will furnish perpetual accommodations for harboring coal. The other electric plant on Plum St. will be used as a place of distribution.

INDIANAPOLIS, IND.—Bids are asked by the Commissioners of Marion County until 10 a. m., April 5, for furnishing and installing new boilers, pumps, heater and necessary pipe work for the Marion County power-house. C. J. Clark is County Audr.

ANDERSON, IND.—The Union Gas Co., M. A. Milspaugh, Pres., is planning to build a large artificial gas plant and lay pipes to supply this city and all other towns and cities within a radius of 35 miles.

LANSING, MICH.—We are officially advised that plans are now being prepared by D. K. Crighton, Engr., for a combined coal and water gas plant for the Lansing Fuel & Gas Co.

ESCANABA, MICH.—Bids are asked until March 23 for improvements to the municipal electric light plant. John Roemer is Mgr. and Ch. Electrician. Estimated cost, $16,000.

GRAND RAPIDS, MICH.—William Holmes, of Menominee, Wis., proposes to proceed at once to build a plant and transmit power to both Menominee and Marinette. Mr. Holmes holds legislative grants from Michigan and Wisconsin for constructing a dam on the Menominee River.

PANA, ILL.—A franchise for a gas plant will be petitioned for by A. E. Dunn, of Greenville. The proposed plant will cost about $100,000, and will have a daily capacity of 120,000 cu. ft.

DODGEVILLE, WIS.—The Empire Mining Co. has decided to install a complete electrical system at a cost of $16,000, to operate all machinery, trams, etc.

MADISON, WIS.—A central heating plant at the University of Wisconsin, to cost about $150,000, is to be constructed according to reports. Charles R. Van Hise, Madison, is Pres.

PRAIRIE DU SAC, WIS.—A bill has been introduced before the Legislature, authorizing construction of a dam about one mile above this village. By this measure sanction is given to J. S. Tripp, of Prairie du Sac, Robert Buerki, of Sauk City, Wis., M. A. Dewitt, of Chicago, and Magnus Swenson, of Madison, to build and maintain an 18-ft. dam across the Wisconsin River. The dam must be constructed with suitable fishway so as to admit of the free passage of fish. The dam will be from 400 to 500 ft. long, and about $1,000,000 will be expended in its construction and in power-house and transmission lines. It is estimated that 12,000 HP. can be developed.

DAVENPORT, IOWA.—The Independent Power Co. has been incorporated with a capital stock of $600,000 to build an electric light and power plant with underground conduit system. C. J. Van Mauer is Pres.; George M. Bechtel is Secy.

LEEDS, N. DAK.—The Leeds Electric Light & Power Co. is contemplating the installation of a public steam heating system in its plant. C. G. Candee is Mgr.

AFTON, IND. T.—The Cherokee Power Co. has been incorporated here with a capital of $1,000,000. The company proposes putting in a power plant on the river near here that will furnish power and light for cities within a radius of 35 miles. Plans showing the location of the proposed electric power plant to be erected on Grand River, twelve miles southwest of Afton, have been filed at Washington, D. C. The proposed new plant will harness the water of Grand, Spring, Neosho and Cowskin Rivers, and Shoal, Brush, Five-Mile and Lost Creeks, and will have a capacity equal to 15,000 HP. Special machinery for the plant will have to be manufactured. It is stated that the equipment will be in duplicate throughout. The officers and directors of the company are: Joseph Schneider, Joplin, Pres.; Charles Moore, Joplin, Vice-Pres.; Thomas M. Reynolds, Afton, Secy.-Treas.

OSCEOLA, ARK.—Arrangements are completed for damming the Oosage River, it is reported, at a cost of $25,000.

COLORADO SPRINGS, COLO.—It has been announced that more than ten miles of gas mains and connecting pipes are to be laid in this city during the coming summer by the Colorado Springs Gas Co. Ira A. Miller is Mgr.

SEATTLE, WASH.—Bids are asked until 3 p. m., April 30, by James Knox Taylor, Superv. Arch., Washington, D. C., for installing a conduit and wiring system for the U. S. court-house, custom-house and post-office at Seattle.

MARSHFIELD, ORE.—The City Council of Marshfield recently passed an ordinance granting a franchise to Seymour H. Bell, as trustee for the Coos Bay Gas & Electric Co., the right to construct, operate and maintain a gas plant. Henry Hewitt, Jr., of Tacoma, and L. J. Simpson are interested. Estimated cost of proposed plant, $200,000.

SANTA CRUZ, CAL.—The plant of the Big Creek Power Co. will be increased to 5,000 HP. and a concrete dam will be built 150 ft. high across the creek near its head waters. Another power plant of 1,000-HP. capacity will be across the track from the beach. It will be connected with the ocean by a 16-in. pipe, and will contain fire pump to protect the Casino buildings. C. E. Lilly is Secy. and Mgr.

SACKVILLE, N. B.—The Cove Hydro-Electric Co., Boston, Mass., is considering installation of electric plants for light and power purposes in Sackville, also at Moncton, Dorchester, Memramcook and other towns.

BRANTFORD, ONT.—The Ham-Nott Co. is about to erect a new building and power plant at a cost of $100,000.

STRATHCONA, ALTA.—The INTERNATIONAL GAS LIGHTING & HEATING CO., Cleveland, Ohio, has contracted with the city to supply gas for lighting and heating purposes and agrees to spend $300,000 on erection of a plant. M. E. Springer is representing the company in Western Canada.

EDMONTON, ALTA.—R. R. Keeley, City Engr., has recommended to the City Council the purchase of a 500-KW. electrical gas producing engine. Cost, $12,000.

BATTLEFORD, SASK.—Bids are asked until 5 p. m., April 15, by R. C. Lourie, Secy.-Treas. of the Town of Battleford, for installing an electric lighting system. Galt & Smith, 23 Jordan St., Toronto, are Consult. Engrs.

PANAMA.—See under U. S., Possessions and Cuba.

## BRIDGES.

*The names of parties awarded contracts are printed in capital letters.*

CLINTON, ME.—Surveys and estimates have been prepared for erecting 500-ft. bridge across Kennebec River, between Fairfield and Clinton, at Pishons Ferry.

SOUTH HERO, VT.—Bids are asked by Jones & Isham, 148 Church St., Burlington, Vt., until 2 p. m., March 25, for constructing culvert at Sand Bar Bridge, South Hero. C. E. Gifford is Chn.

NEW YORK, N. Y.—We are officially advised that the F. W. CARLIN CONSTRUCTION CO., Washington St., Brooklyn, has been awarded contract for alteration of Manhattan steel viaduct and masonry approach and construction of bridge and tunnel entrances for Williamsburg (New East River) Bridge over East River, between the Boroughs of Manhattan and Brooklyn, at $404,865. The company desires quotations on all material for the work.

LONG ISLAND CITY, N. Y.—See under Miscellaneous Contracts: Tunnels and Approaches and Bridge Substructures.

HARRISBURG, PA.—M. B. Cowden, City Engr., has completed plans for constructing bridge over Mulberry St. Bridge to be constructed of steel or concrete, 1,500 ft. long, and have 50-ft. roadway. Estimated cost, $250,000.

NORRISTOWN, PA.—The construction of a county bridge over Stony Creek at Markley St. is contemplated. Estimated cost, $13,500.

PETERSBURG, VA.—We are officially advised that the Roanoke Bridge Co., Roanoke, Va., is lowest bidder for constructing steel bridge over Appomattox River, at $2,975. R. D. Budd is City Engr.

EDENTON, N. C.—Bids are asked until April 1 by Charles O. Haines, Vice-Pres. of the Norfolk & Southern Ry. Co., at Raleigh, for furnishing material and constructing timber and pile trestle across Johnson's Creek, at Edenton, 500 ft. long, and also timber and pile trestle across Albemarle Sound, from Hornblower or Skinner's Point to a point near Mackey's Ferry, 27,204 ft. in length. F. L. Lake, at Berkley, Va., is Supvr. Bridges and Bldgs.

TAMPA, FLA.—A bridge costing $95,000 will be constructed here by the Seaboard Air Line Ry. Co. Work will begin within 60 days. E. A. Frink, at Portsmouth, Va., is Bridge Engr.

MEMPHIS, TENN.—Bids are asked until March 26 by F. M. Guthrie, Chn. of Com., 70 Madison Ave., for constructing steel span 220 ft. long, repairing and re-erecting two old spans 100 and 125 ft. long respectively, constructing two new steel piers and one concrete abutment on Hindman Ferry Road.

CLEVELAND, OHIO.—Bids are asked by the Board of County Commissioners, Julius C. Dorn, Clk., until 11 a. m., April 6, for constructing concrete abutments in Bedford Township. A. B. Lea is County Surv.

CINCINNATI, OHIO.—Bids are being received by the Board of Public Service for constructing superstructure of Harrison Ave. viaduct. Estimated cost, $280,000. Charles N. Danenhower is Ch. Engr., Bd. Pub. Service.

Preliminary plans for elimination of Hopple St. crossing of the Baltimore & Ohio Southwestern R. R., near the stockyards, have been submitted by Superintendent Bouscaren, of the Track Elevation Dept., to C. N. Danenhower. The plans provide for steel viaduct 1,700 ft. long from Meeker St. across B. & O. S.-W. and Mill Creek to a point 300 ft. east of the Cincinnati, Hamilton & Dayton Ry. Estimated cost, $500,000.

GRANVILLE, OHIO.—Bids are asked until April 11 by the Board of County Commissioners at Newark, for constructing 25-ft. span concrete steel arch with 16-ft. roadway across Pamp Creek, on Lancaster Road, Union Township, about three miles south of Granville. H. L. Maddocks is County Engr.

SOUTH BEND, IND.—Bids are asked until April 8 by the County Commissioners for erecting Melan arch bridge of three 80-ft. spans in Portage Township, over St. Joseph River, and for re-erecting steel bridge, two spans, 126 ft., on new concrete substructure, in Clay Township. A. I. Hammond, South Bend, is Engr. John W. Harbon is County Audr.

COVINGTON, IND.—Bids are asked by the County Commissioners until noon, April 2, for constructing bridges as follows: One 20-ft. span, three 25-ft. spans, one 40-ft. span, and one 71-ft. span. William B. La Baw, at Veedersburg, is County Surv.

HUNTINGTON, IND.—Bids are asked by the Board of County Commissioners until March 28 for constructing two steel bridges. George S. Morris is County Audr.

CHICAGO, ILL.—Bids are asked until March 28 by the Department of Public Works, William L. O'Connell, Comr., for removing old caps, wales, and planking wherever necessary from the old protections, removing old chain from pile clumps, pulling old stumps and piles and furnishing, delivering and driving new piles of the length required at the various bridges; also, furnishing, delivering and putting in place all chains and splices necessary on the said work.

URBANA, ILL.—Bids are asked until March 29 for constructing a 16 × 80 ft. highway bridge on concrete. Ira O. Baker, at Champaign, Ill., is Engr.

MILWAUKEE, WIS.—The Joint Committee on Highways, Bridges, Laws and Legislations of the County Board has decided to accept plans of the Concrete Steel Engineering Co., Park Row Bldg., New York, for proposed Grand Ave. Viaduct, and has authorized the Chairman of Committee and County Clerk to receive bids for constructing the viaduct.

RACINE, WIS.—The Public Park Commissioners are reported to have authorized A. A. Guilbert, Robinson Blk., to prepare plans for constructing two bridges from the mainland to Island Park.

CLINTON, IOWA.—Bids are asked by Frank W. Leedham, County Audr., until 11 a. m., March 22, for constructing pile or wooden bridges in Clinton County.

DULUTH, MINN.—Bids are asked by O. Halden, County Audr., until April 9 for constructing steel bridge over St. Louis River at Aurora Road. Bridge to have 120-ft. span and 18-ft. approaches.

KANSAS CITY, MO.—We are officially advised that bids were received Feb. 25 for constructing bridge across Brush Creek as follows: The Parker-Washington Co., 2301 Penn St., Kansas City, $13,800; Topeka Bridge & Iron Mfg. Co., 13th and Jefferson Sts., Topeka, Kan., $14,200; R. J. & W. M. Boyd Construction Co., Kansas City, $15,192; Kansas City Construction Co., Spring, and Grand Aves., Kansas City, $15,536; A. J. Middleton & Son Construction Co., 310 Postal Telegraph Bldg., Kansas City, $16,129; Grund-Alt Construction Co., 212 Granite Bldg., St. Louis, $17,168; Farrister-Swenson Construction Co., 205 Postal Telegraph Bldg., Kansas City, $17,732; Union Bridge Construction Co., 606 New Nelson Bldg., Kansas City, $18,250; The Midland Bridge Co., 622 Gibraltar Bldg., Kansas City, $18,888, and Kansas City Bridge Co., 1108 East 15th St., Kansas City, $18,799. Edgar A. Harper is City Engr.

MITCHELL, S. DAK.—Bids are asked by H. B. Anderson, City Audr., until April 5 for erecting three steel bridges, each 60 ft. long.

TEMPLE, TEX.—The County Commissioners have awarded contract to the OTTUMWA BRIDGE CO., of Ottumwa, Iowa, for constructing seven steel bridges. The recent bond issue of $20,000 will be used for this purpose.

DENVER, COLO.—Bids are asked by the Board of Public Works, G. E. Randolph, Pres., until 11 a. m., April 15, for constructing reinforced concrete bridge over Cherry Creek at Bannock St. (Advertised, Engineering News.)

SEATTLE, WASH.—The INTERNATIONAL CONTRACT CO., of Seattle, has been awarded contract for erecting steel draw-bridge, 240 ft. long, across Swinomish Slough, near Whitney, on road to Anacortes. In addition to the draw there will be 150 ft. of steel approaches and 500 ft. of viaduct, all supported on concrete piers. Cost, $31,895.

TRINIDAD, WASH.—The contract for the erection of concrete piers of the Milwaukee railroad bridge across Columbia River at Trinidad has been let to the BATES ENGINEERING & CONSTRUCTION CO., of Chicago. The bridge will be 2,700 ft. long, and have twelve concrete piers.

FORT ROSECRANS (San Diego post-office) CAL.—Bids are asked until April 1 by Capt. C. D. V. Hunt, Q. M., U. S. A., San Diego Barracks, San Diego, for constructing foot path and four foot bridges at Fort Rosecrans.

OROVILLE, CAL.—The County Supervisors have awarded contract for constructing steel bridge across Butte Creek to JENKIN & WELLS, of Sacramento, Cal., at $4,293.

SAN DIEGO, CAL.—The Board of Supervisors has awarded to CHARLES STEFFEN contract for erecting three bridges on the coast road as follows: San Diequito, $7,350; La Costa, $1,450, and Carlsbad, $1,450.

DAGGETT, CAL.—We are officially advised that the Board of County Supervisors has awarded contract to the OTTUMWA BRIDGE CO., of Ottumwa, Iowa, for constructing bridge across Mojave River, at $13,900.

OGDEN, UTAH.—The Southern Pacific Co. has decided to construct six bridges at this city. W. Hood, at San Francisco, Cal., is Ch. Engr., Bridges and Roadways.

ST. JOHN, N. B.—Bids are asked by William Downie, Gen. Supt., Atlantic Division, Canadian Pacific Ry., until 2 p. m., April 1, for constructing concrete abutments and piers at various bridges. C. B. Brown, at St. John, is Div. Engr.

HUNTINGDON, QUE.—A steel bridge will be constructed at this place. W. A. Weir, at Quebec, is Minister Wks. and Labor.

DAUPHIN, MAN.—Bids are asked by J. A. Gorby until March 30 for constructing two 60-ft. span steel bridges on piles, with steel joists, and one wooden 60-ft. span Howe truss bridge.

CALGARY, ALTA.—The Provincial Government will construct steel bridge across Bow River. Estimated cost, $25,000. W. H. Cushing, at Calgary, is Minister Pub. Wks.

## BUILDINGS.

*The names of parties awarded contracts are printed in capital letters.*

PORTSMOUTH, N. H.—Plans and specifications are being prepared by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for constructing a brick building with granite trimmings, steel frame, about 208 ft. long by 80 ft. wide, at the Navy Yard, Portsmouth, N. H. The amount available for the work will be $100,000 and the contract will call for competition in a year. Specifications will be issued about April 10 and bids asked for about May 10.

NEW YORK, N. Y.—Plans have been filed for a 12-story commercial building, to be erected for the Acme Building Co., 32 Union Sq., at 9 West 20th St. It will be constructed of brick, with freestone trimmings, having a frontage of 28 ft. and a depth of 85 ft. It will cost $125,000. W. G. Pigueron is Arch., 32 Union Sq.

Plans have been filed with the Buildings Superintendent for an 11-story office and store building to be erected at 64 and 66 Wall St., for the Fifth Ave. and 18th St. Realty Co. It is to have a frontage of 50.10 ft. and a depth of 100.2½ ft., and will be equipped with three elevators. The facade will be of granite for the first three stories and limestone with trimmings of terra cotta above. The building is to cost $200,000. Maynicke & Francke, 298 Fifth Ave., are Archs. Henry Corn, 320 Fifth Ave., is Pres.

NEW YORK, N. Y.—We are officially advised that contract for concrete work in constructing factory building, at 36th St. and Second Ave., Brooklyn, for the Bush Land Co., 100 Broad St., New York, has been let to the TURNER CONSTRUCTION CO., 11 Broadway. The building will be constructed entirely of reinforced concrete, and will be six stories high, 398x75 ft. Contracts for roof, elevators, plumbing, heating, window and door frames, etc., will be let early in April. W. Higginson, Park Row Bldg., is Arch.

The Murphy Construction Co., 5 East 42d St., will prepare the plans for a loft and office building to be erected at the corner of Lafayette and Howard Sts., for the American Brass & Copper Co., 193 Center St. The building will be twelve stories high, 100.6x87 ft., brick, stone and terra cotta, structural steel, fireproofing construction, with concrete floors, iron stairs, tar and gravel roofing, electric wiring, etc. Cost, about $350,000.

Plans have been filed with the Buildings Superintendent for a 12-story flatiron building to be erected for Mrs. Lena Goldstein, on the triangular plot at the junction of the southern end of Sixth Ave., at Cornelia and West Fourth Sts. It is to be of brick, trimmed with limestone, and will have a Sixth Ave. frontage of 105 ft. and 115 ft. in Cornelia St. The building will be 9.3½ ft. wide in West 4th St., the apex of its flatiron plan. The cost is estimated at $275,000 by Frederick Ebeling, Arch., 420 East 9th St.

NEW YORK, N. Y.—Bids are asked until 11 a. m., April 1, by C. B. J. Snyder, Supt. School Buildings, for general construction of Public School No. 153, on Homecrest Ave., Ave. T. and East Twelfth St., Boro. of Brooklyn. Also for general construction of additions to and alterations in Public School No. 16, on Matilda and Catherine Sts., about 150 ft. south of East 240th St., Wakefield, Boro. of the Bronx.

Bids are asked by the Department of Public Charities, until 2.30 p. m., April 1, for alteration and extension of the present Nurses' Home and a Nurses' Home for the Metropolitan Hospital at Blackwell's Island, New York. Robert W. Hebberd is Comr.

SCHENECTADY, N. Y.—We are officially advised that the HUDSON VALLEY CONSTRUCTION CO. of Troy has been awarded the general construction contract for erection of a new storehouse building for the General Electric Co. at Schenectady. The building will be 400x130 ft., three stories in height and of brick, steel and concrete construction. Estimated cost, $250,000. Charles P. Boland is Gen. Mgr. of the construction company.

WEST POINT, N. Y.—Bids are asked until noon, April 15, by the Quartermaster, West Point, for tile and marble work in the Cadet Barracks (old), West Point. (Advertised, Engineering News:)

FORT HANCOCK, N. J.—Plans and specifications for constructing, plumbing and wiring ordnance storehouse, employees' quarters and picket guardhouse at this post, as advertised in Engineering News, are on file at office of Engineering News, New York. Lieut. William Paterson is Q. M. Bids are asked until April 13.

PITTSBURG, PA. — Henry Hornbostel, Lewis Bldg., Pittsburg, has prepared plans for a 2-story building to be erected in the areaway in the county court yard as an addition to the court-house. Cost, $500,000. I. K. Campbell is County Comr.

The A. & S. WILSON CO. has secured the contract for a 6-story store and apartment house for W. R. Kuhn at North Highland Ave. and Kirkwood St. Estimated cost, $200,000. J. Carlton Strong, 170 Broadway, New York, N. Y., is Arch.

PHILADELPHIA, PA.—Tentative plans for erection of a convention hall have been prepared by John Jerome Deery, Arch., Betz Bldg., Philadelphia. It is proposed to erect the hall on Parkway, between 24th and 25th Sts., at a cost of about $1,000,000.

J. H. Windrim, Arch., Commonwealth Bldg., has plans ready for bids for a 10-story office building, at the corner of Fifth and Chestnut Sts., for the Stephen Girard estate. Brick, architectural terra cotta, stone and steel will be used for construction, and the building will have slag roof, open plumbing, tile and marble work, plate glass, electric light fixtures, etc. Cost, $1,000,000.

PHILADELPHIA, PA. — Adolph Segal, Drexel Bldg., is now planning erection of a building to cover the block immediately north of Hotel Majestic, which will cost $3,000,000 and contain two theaters, a mezzanine for women, a clubhouse for men and a roof garden. On the ground floor, according to the scheme, the theaters will be placed, one for vaudeville and one for the drama. Seating capacity of each will be 3300.

Plans are being prepared by J. Horace Cook, Arch., City Hall, for the proposed Girls' Commercial High School, to be erected at Broad and Mount Vernon Sts., for the Board of Education. The school will be constructed of brick and stone, and will have four stories. Estimated cost, $250,000.

WASHINGTON, D. C. — Elliott Woods, Supt. of the U. S. Capitol Building and Grounds, has awarded to the OTIS ELEVATOR CO., 17 Battery Pl., New York, contract for furnishing electric elevators in the new House of Representatives Office Building at $68,750. Also to the AUTOMATIC MAIL DELIVERY CO., Times Bldg., New York, for furnishing mail conveyors in the same building at $2,472.

WASHINGTON, D. C.—The Governing Board of the Bureau of American Republics will make public soon all the conditions of the competition to be held for plans to be used in the erection of the bureau's new $750,000 building, given by Andrew Carnegie. The building will stand in the center of the five-acre plot of ground now used by George Washington University, lying south of the State Department Building, adjoining the Mall. Plans to be submitted are to include gateways, drives and other features for the conversion of the plot into a garden suited to the building. Competition is to be open to architects on this continent only.

ATLANTA, GA.—The recent appropriation by Congress of $100,000 for construction work on the Federal prison is for the fiscal year ending June 30, 1908. This construction will be done by prison labor and will require from 3½ to 4 years for its completion. Additional appropriations of about $400,000 are planned. William H. Moyer is Warden, U. S. Penitentiary.

BIRMINGHAM, ALA.—The Wimberly & Thomas Hardware Co. will erect a 4-story warehouse, at a cost of $150,000. The EVANS BROS. CONSTRUCTION CO. has secured contract for construction.

NASHVILLE, TENN.—A jail to cost about $110,000 will be erected here. Wheeler, Runge & Dickey are Archs., and W. G. M. Campbell is Member of Bldg Com.

LOUISVILLE, KY. — A 15-story office building to cost $600,000 will be erected here, it is reported. Arthur E. Mueller & Co. are interested.

CLIFTON, OHIO.—The Sisters of Charity, it is reported, have secured a site and have had plans prepared by Gustave W. Drach, Arch., Union Trust Bldg., Cincinnati, for a hospital to be erected at a cost of $450,000.

FLINT, MICH.—Bids are asked until 3 p. m., April 18, by James Knox Taylor, Superv. Arch., Washington, D. C., for construction of U. S. post-office at Flint.

SUPERIOR, WIS.—Bids are asked until 3 p. m., April 10, by James Knox Taylor, Superv. Arch., Washington, D. C., for installing electric passenger elevator in the U. S. post-office, court-house and custom-house at Superior.

MILWAUKEE, WIS.—The Chicago & Milwaukee Electric R. R. Co., it is stated, will erect a $200,000 terminal building at Wells and Second Sts. A. C. Frost, 108 La Salle St., Chicago, Ill., is Pres.; R. B. Stearns, Highwood, is Gen. Mgr.

ST. LOUIS, MO.—H. F. Roach, Chemical Bldg., is preparing plans for a 2½-story store and apartment building, to be erected at McPherson and Euclid Aves., for Claude E. Vrooman, 8½ North Eighth St. Brick and stone, iron and steel work will be used in construction with composition roof, plate glass, iron store front, hard plaster, marble and tile work, combination light fixtures, nickel plumbing, etc. Estimated cost, $150,000.

The Lucerne Realty Co. will erect a flat at a cost of $150,000. A. Blair Ridington, 620 Chestnut St., is Arch.

Mauran, Russell & Garden, Chemical Bldg., are reported to have prepared plans for building to be erected by the National Bank of Commerce. The building will have 16 stories and will be 149x127 ft., of granite construction. Cost, $2,500,000.

The James Black Masonry & Contracting Co., Commercial Bldg., let plumbing contract to JOSEPH F. TUMALTY, 110 South Ninth St., for a $200,000 church for the Second Baptist congregation.

ST. JOSEPH, MO.—Eames & Young, Chestnut and Seventh Sts., St. Louis, and E. J. Eckel, Commercial Bank Bldg., St. Joseph, have prepared plans for a 6 or 8-story hotel, 140x160 ft., for the Buchanan Hotel Co., Milton Tootle, Jr., Pres., St. Joseph. The structure will be of brick, terra-cotta and reinforced concrete construction, and will cost about $300,000.

E. J. Eckel, Commercial Bank Bldg., it is reported, has prepared plans and is taking bids for a 7-story brick, stone and terra-cotta, iron and steel auditorium building, 138x232 ft., for the St. Joseph Auditorium Co. W. O. Waller is interested. Cost, $150,000.

LITTLE ROCK, ARK.—We are officially advised that the proposed post-office for Little Rock will be 80x140 ft, two stories high of stone fireproof construction. Plans are now in course of preparation at the office of James Knox Taylor, Superv. Arch., Washington, D. C. Bids will be asked for about July 1.

DENISON, TEX.—JAMES STEWART & CO., Lincoln Trust Bldg., St. Louis, Mo., have the general contract for constructing the Union station, to be erected in Denison, for the Missouri, Kansas & Texas Ry. Co. Estimated cost, $300,000. F. W. Bailey, Denison, is Supt. Bridges and Bldgs.

SPOKANE, WASH.—Bids were opened March 14, at the office of James Knox Taylor, Superv. Arch., Washington, D. C., for the construction of the U. S. post-office building and court-house at Spokane, Wash. Bids were: Hastie & Dougan, Washington Bldg., Seattle, Wash., $566,300, 30 months; Wm. H. Maxwell, Deadwood, S. Dak., $416,750, April 1, 1909; J. H. Wiese, South Omaha, Neb., $423,250, Aug. 1, 1909; John T. Hoetter, Spokane, Wash., $475,558, 30 months; M. C. Murphy, Spokane, Wash., $483,000, 34 months.

James A. Moore and associates will begin at once erection of a $500,000 store and office building on the block on Union St., between Fourth and Fifth Aves.

SPOKANE, WASH.—Plans have been completed for a 6-story office building which Isaac N. Peyton will build at the corner of Sprague Ave. and Post St. Work on the building will begin within 60 days. It will be a reinforced concrete structure, fireproof and modern throughout. The building and improvements will cost about $500,000.

SAN FRANCISCO, CAL. — The White House, Raphael Weill & Co., Van Ness Ave. and Pine St., will erect a building, 275x137 ft., to cost about $800,000, on the corner of Sutter St. and Grant Ave.

Thomas Crellin has applied for a permit to erect a 6-story brick building on the corner of Mission and New Montgomery Sts., at a cost of $130,000.

Permission has been granted to Thomas J. Clunie, E. A. Bridgford and Burrell G. White, 1700 Shutter St., to erect an office building on the corner of California and Montgomery Sts. Capital, $500,000.

Annie M. Regan has applied for a permit to erect a 3-story brick building at the corner of O'Farrell and Powell Sts., at a cost of $130,000; Sanford Sachs proposes to put up a building to cost $117,500 in Geary St., near Grant Ave., and M. Flood asked leave to expend $108,000 on a new building in the west side of Polk St., near Ellis St.

SAN FRANCISCO, CAL.—Meyer J. Sturm, Arch., 84 La Salle St., Chicago, Ill., is preparing plans for a hospital to be built at San Francisco for the Southern Pacific Co. which will take the figures about April 1. It will be 3-story, 120x60 ft., with two wings, each 140x36 ft., be of fireproof reinforced concrete construction, have pressed brick and stucco exterior, concrete foundation, galvanized iron cornices, gravel roofs, oak, birch, maple and white enamel finish, tile, marble and mosaic work, metal skylights, three dumb waiters, and cost $350,000. The building will be heated from a separate plant. W. C. Edes is Dist. Engr., San Francisco.

The First National Bank has made application to the Board of Works for a permit to erect a 12-story reinforced concrete building at the corner of Montgomery and Post Sts., at a cost of $800,000. There may be some difficulty over the granting of the permit, as the Chief Building Inspector, to whom the plans were referred, is governed by the ordinance which prohibits the erection of a building exceeding in height one and a half times the width of the street it fronts upon.

HULL, QUE.—The Bank of Montreal, Montreal, will expend over $200,000 on a new bank building to be erected in Hull on the property purchased lately from Fortin & Gravelle. Work will commence about May 1.

PETERBORO, ONT.—G. H. PROCTOR, Sarnia, Ont., has secured contract for erection of the new armories here. Cost, $125,190.

SASKATOON, SASK.—Bids are asked by W. W. La Chance, Arch., Regina, Saskatoon, Sask., until April 1, for erection and completion of a hospital here to cost $100,000. J. Leslie is Secy., Saskatoon, Sask.

CALGARY, ALTA.—The ratepayers have decided in favor of building a new town hall at a cost of about $125,000.

## WATER SUPPLY—IRRIGATION.

*The names of parties awarded contracts are printed in capital letters.*

BANGOR, ME.—The Board of Water-Works Commissioners will extend water mains during the present year. Estimated cost, $25,000.

SWANTON, VT.—John L. Collins, C. E., of Albany, N. Y., has prepared plans and surveys for supplying Swanton with water from Fairfield Pond, and offers to install complete system for $68,850.

PROVIDENCE, R. I.—Bids are asked by the Department of Public Works, Walter F. Slade, Comr., until 11 a. m., March 26, for laying 15,250 lin. ft. 12 and 16-in. water pipes and appurtenances for extension of high-pressure fire service. Otis F. Clapp is City Engr.

NEW LONDON, CONN.—Bids are asked until noon, April 15, for carting and laying water pipe and specials. W. H. Richards is Engr.

ALBANY, N. Y.—The Board of Contract and Supply has awarded contract to the CAMDEN IRON WORKS, Camden, N. J., at $21,615, for furnishing five centrifugal pumps and engines at filtration plant pumping station. The Camden Iron Works was the highest bidder but received the award over its competitors for the reason that the annual charge for maintenance of the pumps and engines to be furnished by it will be much less. Walter Mellus is City Engr.

NEW YORK, N. Y.—We are officially advised that the following bids were received March 18 by the Board of Water Supply for constructing portions of Catskill Aqueduct, aggregating 10.73 miles in length. Thomas McNally Co., Pittsburg, Pa., $4,126,423; McArthur Bros. Co. and Jules Breuchaud, New York, $4,366,335; Thomas Crimmins Contracting Co., 444 East 69th St., New York, $5,447,170; I. A. Gillespie Co., 71 Broadway, New York, $5,644,495; Cranford Co., 52 Ninth St., Brooklyn, N. Y., $5,681,762; Naughton Co. and Arthur McMullen, 299 Broadway, New York, $5,653,578; Michael J. Dady, 350 Fulton St., Brooklyn, N. Y., $6,035,530, and Patrick McGovern & Co., 6 Beacon St., Boston, Mass., $6,149,804. The principal items in the Engineer's estimate of the work [illegible] as follows: Excavation in open cut, 1,[illegible] cu. yds.; refill and embankment, 650,[illegible] cu. yds.; excavation and replacing of [illegible] face dressing, 137,000 cu. [illegible] for excavation in tunnels, 170,000 cu. yds. [illegible] masonry for aqueduct in open [illegible] 211,000 cu. yds.; concrete masonry in [illegible] cu. yds.; Portland cement [illegible] steel for reinforcing concrete [illegible] stone boundary walls, 84,000 [illegible] and guard rails, 63,000 lin. [illegible] Engineering News Feb. 21 to [illegible] Waldo Smith is Ch. Engr.

NEW YORK, N. Y.—The [illegible] were received March 13 by [illegible] of Water Supply, Gas and [illegible] furnishing, constructing [illegible] Ridgewood Pumping Station, [illegible] Atlantic Ave., between Logan [illegible] Sts., Boro. of Brooklyn; Guidy [illegible] 1 Madison Ave., Brooklyn, $8[illegible] Ryan, 723 Third Ave., Brook[illegible] C. H. Peckworth, 415 Hudson [illegible] lyn, $314,000; Fuller & O'Con[illegible] St., Brooklyn, $302,000; Mathew[illegible] struction Co., World Bldg., New [illegible] 000; George F. Driscoll, [illegible] Brooklyn, $334,000, and Jame[illegible] 22 Ormonde Pl., Brooklyn, $[illegible]

The Chestnut Hill Reservoir [illegible] city, has been incorporated [illegible] stock of $10,000 to supply wa[illegible] New York State. Incorporators [illegible] A. MacIntosh and Edward J. [illegible] St.

The lowest bid received Mar[illegible] Commissioners of Parks for [illegible] delivering and laying water mai[illegible] tenances in Central Park, betwe[illegible] 72d Sts., was submitted by [illegible] Crimmins Construction Co., 444 E[illegible] at a total of $52,592, includin[illegible] hydrants, etc. It bid for 268 [illegible] c.-i. water pipe, $49.56; 17 tons [illegible] and special castings, $82.08; 7,[illegible] 4-in. c.-i. water pipe, $1.60; [illegible] 6-in. c.-i. water pipe, $1.65; [illegible] 8-in. c.-i. water pipe, $1.85; [illegible] 10-in., $2.05; 3,500 lin. ft. 20-in. galvanized wrought-iron water pipe, $2.15; [illegible] mold, $1.50, and 33,000 sq. ft. [illegible] The Atlanta Construction Co., 434 East 91st St., bid $69,727.

YONKERS, N. Y.—Bids are asked by the Board of Water Commissioners, A. W. Kingsbury, Clk., until 8 p. m., April 4, for constructing water filtration plant, consisting of two covered masonry sand filters and appurtenances. For approximate quantity of work see advertisement. (Advertised, Engineering News.)

AUSTIN, PA.—Bids are asked until 8 p. m., April 4, for furnishing material and constructing water-works system. The work will consist of approximately the following: Furnishing 300 tons c.-i. pipe, 50 fire hydrants and valves, laying four miles of 4, 6 and 8-in. pipe and setting hydrants and valves; furnishing and erecting two gas engines and power pumps; constructing brick pumping station and concrete reservoir. J. F. Wimer, Buffalo, N. Y., is Engr. (Advertised, Engineering News.)

BRADFORD, PA.—Bids probably will be received by the Water Department, S. D. Heffner, Supt., about April 20, for constructing reservoir on hill north of Center St., having a capacity of 4,000,000 gallons. A. F. Bannon, Jr., is City Engr.

HOMESTEAD, PA. — THE CHICAGO BRIDGE & IRON CO., 105th and Throop Sts., Chicago, Ill., is reported to have secured contract for erecting 300,000-gallon standpipe, for $18,000.

SLIPPERY ROCK, PA.—A municipal water plant may be constructed.

PHILADELPHIA, PA.—We are officially advised that the contract for constructing an 18,000-gallon water tank, shelter and connection on roof of No. 3 Building at Depot Quartermaster's Office, 26th St. and Gray's Ferry Road, Philadelphia, has been awarded to MACHOLD & RIDDELL, Stephen Girard Bldg., Philadelphia, at $4,787.

WASHINGTON, D. C.—Bids were opened March 16 at the office of Elliott Woods, Superintendent of the U. S. Capitol Buildings and Grounds, Washington, D. C., for furnishing wrought-iron pipe and fittings for the new House of Representatives Office Building, (a) wrought-iron pipe; (b) fittings and wrought-iron pipe bends; (c) valves; (d) total. Bids were: E. F. Keating Co., 446 Water St., New York, (a) $5,343; (b) $4,405; (c) $1,015; (d) $10,903. Bridgman Bros. Co., 1426 Washington St., Philadelphia, (a) $5,074; (b) $4,765. Crane Co., 519 South Canal St., Chicago, (b) $2,980.

WASHINGTON, D. C.—The District Commissioners have awarded contract for furnishing 500 fire hydrants to A. P. SMITH MFG. CO., Passaic Ave., Newark, N. J., at $43 each.

HANCOCK, MD.—We are officially advised that Council has granted a 40-year franchise to H. P. Bridges, Calvert Bldg., Baltimore, and Arthur Giesler, 29 Broadway, New York, to construct, maintain and operate a water-works system at Hancock.

FORTRESS MONROE, VA.—McCoy Engineering Co., 9 East Lexington St., Baltimore, Md., is lowest bidder at $4,150, and will probably receive contract for extending water-works.

ATLANTA, GA.—Bids are asked by the Board of Water Commissioners until April 10 for furnishing and erecting pressure filter plant with a daily capacity of [illegible],000,000 gallons, at water-works pumping station No. 2. R. M. Clayton is City Engr.

GUNTERSVILLE, ALA.—Bids are asked by D. Isbell, Mayor, until April 2 for construction of water-works. Solomon-Norcross & Hall & Illges Co., Atlanta, Ga., are Engrs.

CINCINNATI, OHIO.—Bids are asked by the Board of Trustees, Commissioners of Water-Works, until noon, April 15, for laying cast-iron pipe and special castings and valves on Madison Road, from Observatory Ave. to Edwards Road, and other miscellaneous work for the extension and betterment of the water distribution system. Elmer G. Prior is Clk.

GARY, ...—The contract for construct- ing 6-ft. ... tunnel under Lake Michigan has been ... led to the GREAT LAKES DREDGE ... OCK CO. of Chicago, Ill. J. W. A... ... and C. B. Burdick, 1207 Hart- ford Bld... ...icago, are Engrs.

CALU... MICH.—BYERS & CO. have been awa... ...ontract by the Copper Range Consolid... Co. for constructing water- works. ... system will include the towns of Palm... Trimountain and Baltic.

CANT... LL.—Bids are asked by Joseph Waugh, ... Clk., until 7 p. m., April 2, for dril... ...eep well. (Advertised, Engi- neering ...)

CHICA... ILL.—Bids are asked until March 2... the Department of Public Works for furn... ...s and delivering at the various city pip... ...ds and along designated streets within t... ...y the following pipe and special castings... ...th Chicago, Clybourn Ave., In- diana ... ...d Stock Yards feeders, about 2,364, ... 2,572, and 3,831 tons respect- ively of ... pipe, and 68, 56, 50, and 64 tons res... ...ely of special castings. William L. O'Co... ...is Comr.

VIRGIN... ILL.—C. W. Brown, of Jack- sonville ... completed plans for construct- ing wate... works system. Estimated cost, $20,000.

MILWAUKEE, WIS.—Bids are asked by the Board of Public Works, Peter J. Koehler, Deputy Comptroller, until 10:30 a. m., March 25, for furnishing material and con- structing for the Water Department a con- crete tunnel under and across Kinnickinnic River, at Becker St., from a point about 50 ft. west of west dock line of Kinnickinnic River to a point about 50 ft. east of east dock line in the Twelfth Ward. Charles G. Poetsch is City Engr. (Advertised, Engi- neering News.)

OSKALOOSA, IOWA.—Bids are asked by the Board of County Supervisors until 2 p. m., April 5, for constructing ditch.

HENDERSON, MINN.—A water-works sys- tem will soon be constructed. Cost, $10,000.

BRECKENRIDGE, MINN.—Bids are asked by R. P. Glover, County Audr., until 10 a. m., March 29, for digging and constructing Ditch No. 6. The work consists of approx- imately 180,000 cu. yds. of excavation. Es- timated cost, $23,300.

Bids also are asked at the same time for digging and constructing Ditch No. 7. The work consists of approximately 78,430 cu. yds. of excavation. Estimated cost, $11,765.

CRAWFORD, NEB.—Bids are asked by the U. S. Reclamation Service until 2 p. m., June 5, for constructing Pathfinder dike, situated about 45 miles southwest of Casper, Wyo. The work involves approximately 170,- 000 cu. yds. of earth excavation and 16,000 cu. yds. of rip-rap. (Advertised, Engineering News.)

GIBBON, NEB.—Bids are asked by the Board of Village Trustees until 7 p. m., March 28, for furnishing material and constructing water-works, to consist of 2,600 ft. of 6-in. pipe, 6,800 ft. of 4-in. pipe, 20 hydrants, 60,000-gallon steel tower and tank and en- gine house. D. P. Ashburn is Village Clk.

BELLE FOURCHE, S. DAK.—Plans, speci- fications and bidding sheets for constructing Sections 2 to 8 of the South Canal with appurtenant structures, Belle Fourche Pro- ject, S. Dak., are on file at office of Engi- neering News, New York. Bids asked until April 10. (Advertised, Engineering News.)

WILLISTON, N. DAK.—The Secretary of the Interior has awarded contract for canals and structures, Buford-Trenton Irrigation Project, N. Dak., as follows: JAMES BUR- TON, Delhi, Iowa, furnishing and installing pressure pipe, $13,282; PENSON & KING, Williston, N. Dak., 13 miles of canal and ditch excavation and construction of bridges, flumes, culverts, etc., $20,867; JOHN S. PENSON, Williston, N. Dak., installing pumping station, $3,333.

CODY, WYO.—Plans, specifications and bidding sheets for constructing structures on Garland Canal and laterals near Ralston, Shoshone Project, Wyo., are on file at office of Engineering News, New York. Bids are asked until April 17. (Advertised, Engi- neering News.)

Bids were received March 12 by the U. S. Reclamation Service, at Huntley, Mont., for constructing Garland canals and laterals, consisting of 185 miles of canals, ranging in capacity from 5 to 1,000 cu. ft. a second, involving approximately 900,000 cu. yds. of excavation. Bids were submitted for Divis- ions 2 to 19, inclusive, as follows: A. J. McGuffey and J. Blood, Cody, Wyo. (bid on any two divisions only): Division 2, $39,184; Div. 3, $32,900; Div. 4, $25,680; Div. 5, $27,475; Div. 6, $27,404; Div. 7, $29,090; Div. 8, $33,367; Div. 9, $19,086; Div. 10, $7,438; Div. 11, $13,229; Div. 12, $10,369; Div. 13, $5,642; Div. 14, $5,048; Div. 15, $7,540; Div. 16, $11,740; Div. 17, $14,263; Div. 18, $7,720, and Div. 19, $14,469. Eman- uel Thomas, Bryon, Wyo., (informal pro- posal): Div. 16, $5,629. G. W. Johnson, Lowell, Wyo., Div. 5, $26,700; Div. 6, $28,- 210; Div. 7, $29,310; Div. 8, $33,310. Item- ized bids will be found this week under Contract Prices.

WHEATLAND, WYO.—Bids are asked by the Wheatland Industrial Co., Joseph M. Carey, Pres., at Cheyenne, Wyo., until April 10, for extending No. 1 Canal of the Wyoming Development Co., at Wheatland. The exten- sion will be about 14 miles long. From the head of the extension for a distance of 29,400 ft., the width on bottom is 14 ft., cut 35 ins., average slope of surface 1 ft. in 6 ft. The next 33,000 ft. is 12 ft. wide on the bot- tom, average cut 29.6 ins., average slope of surface 1 ft. in 8 ft. 5 ins. The remaining 11,800 ft. is 10 ft. wide on the bottom, aver- age cut 22 ins., average slope of surface 1 ft. in 25 ft. The engineer's preliminary esti- mate on the work is as follows: 117,000 yds. of earth, 15,000 yds. of loose stone and 2,500 yds. of rock. Bids also are asked for con- structing two tunnels on line of canal ex- tension. Tunnel No. 1 to be 650 ft. long, 1,200 cu. yds. contents, gravelly soil. No. 2 to be 1,080 ft. long, 2,044 cu. yds. contents, clay and rotten sand rock. Work on canal and tunnels to be completed Nov. 1. Joseph C. Hadsall, at Wheatland, is Engr.

FORT BLISS (El Paso post-office), TEX.—Bids are asked until June 3 by the Con- structing Quartermaster at Fort Bliss for sinking 12-in. tubular deep well, installing deep well pump over same, constructing deep well pump shelter and trestle; a 150,000- gallon steel tank on 70-ft. trestle, and fur- nishing and installing two 40-HP. boilers.

SPOKANE, WASH.—The American Securi- ties Co., through the office of Babcock & Moss, has let contracts amounting to about $30,000 to JARARD & CO. and others for sinking wells, putting in pumps, installing an irrigation plant, putting in fruit trees and developing the land at Jamieson Park.

KLAMATH FALLS, ORE.—Specifications and bidding sheets for constructing Keno Canal, Klamath Project, Ore.-Cal., are on file at office of Engineering News, New York. Bids are asked until April 15. (Advertised, Engineering News.)

LEWISTON, IDAHO.—The HOLLY MASON CO., of Spokane, Wash., has been awarded contract for constructing water-works.

SIMCOE, ONT.—The ratepayers have car- ried a by-law to provide $70,000 for con- structing complete water-works system. Ad- dress Walter C. Reid.

BATTLEFORD, SASK.—Bids are asked by R. C. Laurie, Secy., until April 15 for the following works: (a) all labor and materials necessary for construction of water-works main force, distribution system and intake; (b) all labor and materials necessary for construction of sewer system; (c) the supply and erection of 60,000-gallon elevator tank; (d) the supply and erection of water-works pump; (e) the supply and erection of return tubular boiler; (f) the supply and erection of electric lighting system; (g) the supply at Battleford of cast-iron manholes and catch basins. Galt & Smith, 23 Jordan St., Toronto, are Engrs.

VICTORIA, B. C.—The water-works will be improved. Estimated cost, $50,000. W. J. Dowler is City Clk.

## SEWERAGE.

***The names of parties awarded contracts are printed in capital letters.***

NEW YORK, N. Y.—Bids are asked by Joseph Bermel, Pres. Boro. of Queens, until 11 a. m., April 1, for constructing sewers in various streets, Boro. of Queens.

WATERBURY, N. Y.—Plans are being prepared by John L. Collins, C. E., 444 Broadway, Albany, N. Y., for constructing about six miles of sewers, 6 to 24-in. diam- eter. Bids will be asked about the last of April.

BINGHAMTON, N. Y.—Steps are being taken by the Aldermen for constructing storm water sewer in various streets. S. M. Baird is City Engr.

SYRACUSE, N. Y.—The Common Council has passed an ordinance for constructing 12- in. sewers in portions of Primrose and Stolp Aves. and 15-in. Sewer in portion of West- cott St. George J. Metz is City Clk. Henry C. Allen is City Engr.

TRENTON, N. J.—An ordinance has been passed by the Common Council for con- structing sewer in portion of Washington St. to connect with sewer No. 71. Harry B. Salter is City Clk. Abram Swan is City Engr.

PERTH AMBOY, N. J.—Bids are asked by the Board of Aldermen until April 1 for constructing sewer in Market St., from Grace to Grant Sts. The approximate quan- tities are as follows: 160 ft. 12-in., 30 ft. 15-in., 30 ft. 24-in., 150 ft. 6-in. circular concrete sewer and 600 ft. 2x3 brick sewer. Average cut, 12½ ft. Work to be completed in 60 days. Forrest L. Smith is City Engr.

SAYRE, PA.—We are officially advised that bids were received March 12 by the Borough Council for constructing trunk sewer as follows: Busch & Stewart, $20,- 913; JOHN J. HIGGINS, $19,313 (awarded contract); Bolton G. Coon, $21,561; J. L. Shea & Co., $19,669; H. B. Failing, $22,235; John J. Tyne & Co., $24,669; Moore & Smith, $24,150, and Fritz & Partridge, $22,760. Esti- mated cost by N. F. Walker, Boro. Engr., $19,558. Itemized bids will be given next week under Contract Prices.

RIDLEY PARK, PA.—Bids are asked by W. P. Anthony, Ch. Burgess, until 6 p. m., March 26, for constructing 6-in terra-cotta pipe sewer in portion of Morton Ave. B. G. Ladomus, City Hall Bldg., Chester, Pa., is Boro. Surv.

SHERIDAN, PA.—Bids are being received by C. E. Owens, Boro. Engr., for construct- ing 10 or 12-in. pipe sewers.

PHILADELPHIA, PA.—Promoters who are endeavoring to consolidate a chain of independent sewer pipe plants in the Ohio Valley have formed the Goucher, McAdoo Sewer Pipe Co. It is said that the new corporation will have eventually a capital- ization of $5,000,000. Former officials of the American Sewer Pipe, Co. which controls the greater part of all the sewer pipe and tile product in Pennsylvania and the central west, outside the shale pipe industry of Central Ohio, are supposed to be interested in the new combination. W. B. Goucher until recently was treasurer of the American Sewer Pipe Co.

WASHINGTON, D. C.—Bids are asked by the District Commissioners until noon, April 12, for constructing sewers. (Advertised, Engineering News.)

According to Public Document 169 the following appropriations have been author- ized by Congress for fiscal year ending June 30, 1908, for sewer work in the Dis- trict of Columbia: Cleaning and repairing sewers and basins, $44,000; for suburban sewers, $100,000; for main and pipe sewers and receiving basins, $44,000; for continuing work on extension of east side intercepting sewer from boundary sewer to Brookland, $50,000, and for sewers in the valleys of Broad Branch and Soapstone Branch, $28,000.

NEW ORLEANS, LA.—The Barber As- phalt Co. is reported to have secured con- tract for installation of sub-surface drains on Iberville St., from Claiborne to St. An- thony, for $124,573. W. J. Hardie is City Engr.

LEXINGTON, KY.—The only bid received for constructing sanitary sewer in South Limestone St., from Maxwell to Winslow Sts., was submitted by the Kentucky Plumb- ing Co., as follows: Main line 8-in. pipe, $1.25 per lin. ft.; branch lines, 5-in. pipe, $1.00 per lin. ft.; junctions, 50 cts. each; manholes, $23.00 each; flushtanks, $50.00 each, and construction of street, $300.00. P. P. O'Neill is City Engr.

COVINGTON, KY.—Sewers will be laid in Johnson St., alley west of Kakewell St., Bullock, Short and Eleventh Sts. W. E. Gunn is City Engr.

SHELBYVILLE, KY.—Bids are asked by Camden W. Ballard, Secy. Bd. of Sewer Comrs., until 8 p. m., April 2, for construct- ing system of sewers and septic tank. The sewer system consists of approximately five miles of 6 to 15-in. sewers, 62 manholes, 14 lampholes and 6 flushtanks. The septic tank to be 8 × 34 × 92 ft., constructed of concrete with reinforced concrete roof covered with 18 ins. of earth. Charles E. Collins, of Phil- adelphia, Pa., is Consult. Engr. (Advertised, Engineering News.)

CHAGRIN FALLS, OHIO.—It has been decided to construct sewage disposal plant. Estimated cost, $18,000.

NILES, OHIO.—We are officially advised that William Wilson, C. E., has been au- thorized to prepare plans for constructing sewage disposal plant.

SPRINGFIELD, OHIO.—We are officially advised that the Board of Public Service will award ten contracts to DOYLE & GAF- FREY for constructing sewers in various streets and one contract to M. J. HANNON for constructing sewer in portion of Fern- cliff Ave. The work involves about 7,000 ft. of 8-in. sanitary sewer, with cuts rang- ing from 7 to 8 ft. W. H. Sieverling is City Engr.

TERRE HAUTE, IND.—The following bids were received March 11 by the Board of Public Works for constructing 60-in. brick sewer in Ohio St., from Tenth to 19th Sts.: William T. Erler, $7,250; Guhring & Dinkle, Tuscola, Ill., $11,691; Jesse Robert- son, $9,587, and Roberts & Co., $9,648. Edgar Schmidt is City Engr.

BAY CITY, MICH.—Bids are asked until March 25 for constructing 9,000 ft. of 36- in. reinforced concrete sewers. H. C. Thompson is City Engr.

MENOMINEE, MICH.—Bids are asked by City Council until March 29, for construc- tion of sewers on Dunlap Ave. Albert Hass is City Engr.

MUSKEGON, MICH.—W. R. JONES, of this city, has been awarded contract for constructing Spring St. sewer, at $48,685. C. S. Gamble is City Engr.

CAIRO, ILL.—We are officially advised that bids were received March 12 by the Board of Local Improvements for construct- ing 9,689 ft. of concrete main sewers and necessary appurtenances, as follows: The Mercantile Bridge & Concrete Tile Co., Paris, Ill., $109,815, and Rich Construction Co., Roe Bldg., St. Louis, Mo., $108,813. Itemized bids will be given next week under Contract Prices. W. B. Thistlewood is City Engr.

DECATUR, ILL.—A. D. THOMPSON, of Peoria, Ill., has been awarded contract by the City Council for constructing sewers at $73,800. A. B. Alexander is City Engr.

ROCKFORD, ILL.—The Board of Local Improvements has decided to extend East State sewer from Prospect St. to Paris Ave., a distance of 1½ miles. Edward Main is City Engr.

SPRINGFIELD, ILL.—Contracts for pav- ing were awarded March 6 as follows: JOHN E. BRETZ, paving Second St., from Madison St. to North Grand Ave., with brick, on 6-in. concrete foundation, asphalt fill, 17,000 sq. yds. at $1.65, and 9,300 lin. ft. sandstone curb at 54 cts. per lin. ft.; HENRY NELCH, paving South Grand Ave., from Sixth St. to 14th St., with brick, on 6- in. concrete foundation, sand filler, 20,000 sq. yds. at $1.47, and 5,500 lin. ft. of curb, at 54 cts. per lin. ft. Frank H. Hamilton is City Engr.

OSHKOSH, WIS.—Bids are asked by the Board of Public Works until April 8 for constructing sewers in various streets. George H. Randall is City Engr.

ST. PETER, MINN.—W. F. SYMONDS has been awarded contract for constructing sewers.

WILLMAR, MINN.—Bids are asked until March 25 by H. Gunderson, City Clk., for furnishing material and constructing sewer in Ella Ave. and Eleventh St.

LARNED, KAN.—Bids are asked until April 1 for constructing sanitary sewer sys- tem. The work includes 2,125 ft. 12-in., 420 ft. 10-in. and 3,750 ft. 8-in. pipe, 20 manholes and two flush tanks. H. A. Row- land, at McPherson, Kan., is Engr.

FAIRBURY, NEB.—The contract for con- structing sewer laterals in Districts Nos. 4, 5 and 8 has been awarded to T. W. ROB- ERTS, of Independence, Mo., for $3,116. F. L. Ram is City Clk.

BATTLEFORD, SASK.—See under Water Supply-Irrigation.

## GARBAGE DISPOSAL.

SCHENECTADY, N. Y.—Bids are asked by the Board of Contract and Supply, Charles O. Dunning, Clk., until 2 p. m., April 24, for collection and sanitary disposal of ashes, rubbish, garbage and dead animals for period of five years, beginning Oct. 1, 1907. (Ad- vertised, Engineering News.)

NEW YORK, N. Y.—HEENAN & FROUDE, of Manchester, England, have been awarded contract for erecting refuse destructor, boiler, etc., complete. The de- structor will have a capacity of 60 tons per day, and the boiler and its appurtenances will be large enough to absorb all heat from the combustion of refuse.

NEW BRIGHTON (S. I.), N. Y.—Bids are asked by George Cromwell, Pres. Boro. of Richmond, until noon, April 2, for sprinkling parts of various highways.

YOUNGSTOWN, OHIO.—The City Council on March 11 passed an ordinance authoriz- ing the Board of Health to contract for re- moval and disposal of garbage, refuse and offal within the city limits for a period of five years.

INDIANAPOLIS, IND.—The Board of Pub- lic Works has awarded contract for sprin- kling the unimproved streets during the present year to FRANK KENINGTON.

## STREETS AND ROADS.

WORCESTER, MASS.—The WEBB GRAN- ITE & CONSTRUCTION CO., of this city, has been awarded contract for laying 8,000 sq. yds. of pavement at $1.60 per sq. yd. George C. Moss is Street Comr.

WESTERLY, R. I.—Bids are asked by the Town Council until 4 p. m., March 25, for widening, macadamizing and improving high- way leading from Westerly to Watch Hill, an approximate distance of 10,000 ft. The work consists of about 6,000 cu. yds. of earth excavation, 4,500 tons of macadam in place, 475 rods of walls and fences to be moved, and 350 cu. yds. of retaining walls.

ALBANY, N. Y.—Charles H. Gaus, Mayor, has signed ordinance establishing grade of Western Ave. from end of present pavement to the city line. The mayor already has signed ordinance providing $40,000 for im- provement of this avenue, and plans and specifications for the work are about com- plete. The plans will call for alternative bids, one for macadam, with carriageway 20 ft. wide, 8-ft. shoulders and 1-ft. gut- ters, making roadway 36 ft. wide; and the other for a brick carriageway 14 ft. wide, with 4-in. concrete curb, 5-ft. gravel shoul- ders, making roadway 24 ft. wide, with larger gutters than are called for by plan for macadam. All culverts are to be con- structed of reinforced concrete. Walter Mellus is City Engr.

BINGHAMTON, N. Y.—Bids are asked by the Common Council until 8 p. m., April 8, for paving Court and Ferry St. bridges with prepared wood block on hydraulic cement concrete foundation. D. C. Herrick is City Clk. S. M. Baird is City Engr. (Advertised, Engineering News.)

Bids also are asked at the same time for re-paving with vitrified brick on 6-in. hy- draulic cement concrete foundation portions of Main and Chenango Sts. and Court and Ferry St. bridges. Approximate estimate of re-paving with brick: Brick, 35,788 sq. yds.; excavation, 10,780 cu. yds., and concrete, 5,965 cu. yds. (Advertised, Engineering News.)

NEWBURGH, N. Y.—It was erroneously stated last week that the contract for pav- ing portion of Lander St. and Water St. had been let to the Standard Bitulithic Co., 253 Broadway, New York. The bid of this company was as follows: For bitulithic on bituminous foundation, $53,809; bitulithic on concrete foundation, 55,533. This contract was awarded to FREDERICK R. PRATT, Prudential Bldg., Newark, N. J., at $55,505, which was $1,323 higher for paving these streets with brick than was the bid of the Standard Bitulithic Co. for its bitulithic pavement.

JOHNSTOWN, N. Y.—The HASTINGS PAVEMENT CO., 25 Broad St., New York, has been awarded contract for paving North Market St. The work includes about 6,733 sq. yds. asphalt paving, 3,142 ft. stone curb, 489 ft. stone headers, etc. Frank Bogaskie is City Clk.

BUFFALO, N. Y.—Bids are asked by the Department of Public Works until 11 a. m., March 29, for paving portions of Pink, Weimer, Clinton and Beacon Sts. and Ox- ford Ave. Francis G. Ward is Comr. Pub. Wks.

NEW YORK, N. Y.—Bids are asked by Joseph Bermel, Pres. Borough of Queens, until 11 a. m., April 1, for regulating, grading, curbing and laying sidewalks on various streets, Boro. of Queens.

The BROOKLYN ALCATRAZ CO., Twelfth St. and Gowanus Canal, has secured contract for regulating and repaving with Medina and asphalt on concrete foundation, 60th St., from Fourth Ave. to Sixth Ave., at the fol- lowing bid: 5,500 sq. yds. asphalt, $1.27; 2,740 sq. yds. Medina sandstone pavement, with cement joints, $3.25; 30 sq. yds. old stone pavement, to be relaid, 35 cts.; 1,380 cu. yds. concrete, $6; 2,770 lin. ft. new curb, 70 cts.; 90 lin. ft. old curb, to be reset, 40 cts; 4 noiseless covers and heads, complete, for sewer manholes, each $16; total cost, $26,870. The Uvalde Asphalt Co., 1 Broad- day, New York, bid for this work, $27,519.

The CRANFORD CO., 52 96th St., Brook- lyn, has secured contract for regulating and repaving with asphalt, on concrete founda- tion, Sixth Ave., from 44th St. to 57th St., at the following bid: 17,080 sq. yds. as- phalt pavement, $1.30; 90 sq. yds. old stone pavement, to be relaid, 35 cts.; 2,630 cu. yds. concrete, $6; 3,790 lin. ft. new curb, 70 cts.; 2,500 lin. ft. old curb, 35 cts.; 35 noiseless covers and heads, complete, for sewer man- holes, $16; total, $43,221. The totals of the other bids received were: Uvalde Asphalt Co., 1 Broadway, New York, $44,305; Barber Asphalt Co., 114 Liberty St., New York, $43,696, and Brooklyn Alcatraz Co., Twelfth St. and Gowanus Canal, Brooklyn, $43,828.

PHILADELPHIA, PA.—Bids are asked un- til noon, March 25, for grading, paving, etc., as advertised and noted in issue of March 7. Bids which were to have been received on March 20 have been recalled. (Advertised, Engineering News.)

BALTIMORE, MD.—The Municipal Board of Awards has awarded contract to WIL- LIAM M. ELDER, 220 St. Paul St., for paving Charles St. from North Ave. to the northern city limits with bitulithic, at $140,- 681. B. T. Fendall is City Engr.

**AUGUSTA, GA.**—The GEORGIA ENGINEERING CO. has been awarded contract for constructing 8,000 sq. yds. vitrified brick pavement at $1.78 per sq. yd.; macadam excavation, 24 cts. per sq. yd. WILLIAM F. BONE secured contract for setting all curbing ordered during 1907, at 35 cts. per lin. ft. for straight and 43 cts. for round curb. C. H. STORY has been awarded contract for constructing all cement sidewalks, at 12½ cts. per sq. ft., cement 1-in. on 3-in. concrete foundation. Fred L. Patterson is Secy. Pub. Wks. Dept.

LOUISVILLE, KY.—Bids are asked by the Board of Public Works until March 27 for paving Slaughter Ave. from Baxter to Everett Aves., and Market St. from Tenth to Twelfth Sts. The work consists of 6,300 sq. yds. asphalt pavement. Estimated cost, $16,000. J. P. Claybrook is Ch. Engr. Dept. Pub. Wks.

The BARBER ASPHALT PAVING CO., 114 Liberty St., New York, has contract for paving 6,858 sq. yds. on Fourth St., at $1.62 per sq. yd. and 2,718 sq. yds. on Preston St., at $1.31 per sq. yd. G. W. GOSNELL, for paving six alleys, at $1.47 to $1.50 per sq. yd., and L. R. FIGG, three alleys, at $1.45 per sq. yd.

ASHLAND, KY.—Bids are asked until April 17 for laying 30,000 sq. yds. brick pavement on concrete foundation and 19,000 lin. ft. concrete curb and gutter. J. W. Bosley is City Engr. (Advertised, Engineering News.)

BURKESVILLE, KY.—The Commercial Clubs of Burkesville and Columbia, Ky., are planning construction of turnpike road, 30 miles long, to connect these two towns.

CINCINNATI, OHIO.—Bids are asked by the Board of Public Service, M. J. Keefe, Clk., until noon, March 28, for grading, macadamizing and laying cement curb and gutter on portion of Beech Ave. Estimated cost, $7,390. Bids also are asked at the same time for grading, paving with broken stone and brick and laying limestone curb on portion of Dover St. Estimated cost, $11,800. C. N. Dannenhower is City Engr.

Bids are asked by the Board of Public Service until noon, March 29, for paving with wooden blocks on concrete foundation and laying sandstone curb on portion of Albany Ave. Estimated cost, $39,693. Bids also are asked at the same time for paving with granite blocks on concrete foundation and laying granite curb on portion of Highland Ave. Estimated cost, $25,226.

Bids are asked by the Board of Public Service until noon, April 1, for paving with brick, boulders and granite, and laying sandstone curb on portion of First Ave. Estimated cost, $10,018. Bids also are asked at the same time for paving with broken stone, paving gutters with brick, grading, laying 12-in. pipe and sandstone curb on portion of South Hudson St. Estimated cost, $5,875.

Bids are asked by the Board of Public Service until noon, April 4, for paving with wood blocks, grading and laying granite curb on portion of McMillan St. Estimated cost, $30,923. Bids also are asked at the same time for paving with granite blocks, grading and laying granite curb on portion of Broadway. Estimated cost, $8,445.

Bids are asked by the Board of Public Service until noon, April 8, for paving with brick, grading and laying sandstone curb on portion of Hawthorne Ave. Estimated cost, $9,900. Bids also are asked at the same time for paving with brick, grading and laying sandstone curb on portion of Matson Pl. Estimated cost, $4,790.

ST. CLAIRSVILLE, OHIO.—All bids received March 1 for 19,000 sq. yds. brick paving on Main St., as advertised in Engineering News, have been rejected, and new bids are asked until noon, March 29. John C. Nichols, City Clk.

CANTON, OHIO.—T. H. WILSON has been awarded contract by the State Highway Commissioner for constructing 16-ft. roadway 1¼ miles long, at $14,000. Sam Houston is Commissioner.

XENIA, OHIO.—Bids are asked until March 28 by the County Commissioners for furnishing material and constructing macadam road, about three miles of road known as Xenia and Dayton Pike. William Dodds is County Audr.

COLUMBUS, OHIO.—Bids are asked by the City Council until March 26 for paving Franklin St. William H. Rights is City Engr.

COLUMBUS, OHIO.—Bids are asked by Sam Huston, State Highway Comr., until April 3, for constructing highway.

INDIANAPOLIS, IND.—Bids are being received by the Board of Public Works for paving Gladstone Ave. with brick and laying cement walks on 22d St. Blaine H. Miller is City Engr.

PRINCETON, IND.—THOMAS BELOAT, of this city has been awarded contract for constructing eleven miles of gravel roads, at $32,657. Harry R. Embree is County Audr.

PERU, IND.—The City Council has ordered Engineer Horan to prepare plans and specifications for paving all streets from Canal to Eighth St. one square each way from Broadway.

VINCENNES, IND.—Bids are asked by the County Commissioners until 2 p. m., April 5, for construction of 9,243 ft. of gravel road in Vincennes Township, and 13,585 ft. of gravel roads in Palmyra Township. John T. Scott is County Audr.

Bids are asked by the County Commissioners until 1 p. m., April 2, for constructing 1,448 ft. of road in Vincennes Township.

BAY CITY, MICH.—Bids are asked until March 25 for laying 1,200 sq. yds. brick pavement on 5-in. concrete foundation. H. C. Thompson is City Engr.

MENOMINEE, MICH.—Bids are asked by City Council until March 29 for paving Ogden Ave. and Main St. Albert Hass is City Engr.

HASTINGS, MICH.—Bids are asked until March 29 by James M. Patten, City Clk., for furnishing material and paving with brick on gravel or concrete foundation, portions of State, Church and Jefferson Sts. The work consists of approximately 11,912 sq. yds. paving, 3,584 lin. ft. curbing, 4,350 cu. yds. excavation, and 2,690 lin. ft. storm sewer.

DETROIT, MICH.—The following are reported to be the lowest bids received March 8 by J. J. Haarer, Comr. Pub. Wks., for paving portions of (a) Woodland, (b) Canton Aves., (c) Fort, (d) Third (e) Townsend Sts.: Cleveland Trinidad Asphalt Paving Co., of Cleveland, Ohio, (a) $19,814 and $19,897, (b) $17,063 and $17,174. W. W. Hatch Sons Co., (c) $22,192, (d) $6,116, (e) $24,033.

CHICAGO, ILL.—Bids are asked until March 28 by the Department of Public Works, William L. O'Connell, Comr., for furnishing and delivering A. F. Shuman's wood and asphalt pavement, or a pavement equally as good, at the various bridges and viaducts in the city of Chicago, during the period ending Dec. 31, 1907.

PARIS, ILL.—A. J. PARISH, of Paris, has secured contract for paving at the following bid: 8,640 cu. yds. excavation, 18 cts.; 706 ft. resetting curb, 6 cts; 12,115 ft. curb and gutter, 30 cts; 14,682 sq. yds. pavement, foundation of cement, gravel and stone, $1.23; 14,682 sq. yds. cement fill, 8 cts.; 11 inlets, each $12.50; 1,800 ft. 12-in. tile, 25 cts.; 1,000 ft. 10-in. tile, 25 cts.; 15 catch-basins, each $27.50; total, $25,715. The totals of the other bids received were: Porter & Morrisey, Paris, $26,029; Ralph Baum, Paris, $26,541, and Sizimore, Caughlin & Savage, Paris, $26,306. W. T. Blackburn is City Engr.

SPRINGFIELD, ILL.—Contracts for paving were awarded on March 6 as follows: JOHN E. BRETZ, paving Second St. from Madison St. to North Grand Ave., with brick on 6-in. concrete foundation, asphalt fill, 17,000 sq. yds., at $1.63, and 9,300 lin. ft. sandstone curb, at 54 cts. per lin ft. HENRY NELCH, paving South Grand Ave. from Sixth St. to 17th St., with brick on 6-in. concrete foundation, sand filler, 20,000 yds. at $1.47, and 5,500 lin. ft. of curb, at 54 cts. per lin. ft. Frank H. Hamilton is City Engr.

OSHKOSH, WIS.—Bids are asked by the Board of Public Works until noon, April 8, for furnishing material and grading and constructing asphalt pavement with combined cement curb and gutter on Jackson St., between Algoma and Irving Sts. George H. Randall is City Engr.

SUPERIOR, WIS.—E. A. DAHL has been awarded contract for paving Eleventh St., from Oakes to Grand Aves. Estimated cost, $18,000. S. M. White is City Engr.

DAVENPORT, IOWA.—The contract for paving various streets has been awarded to LITTIG BROS. Thomas Murray is City Engr.

OSCEOLA, IOWA.—Bids are asked by W. N. Temple, City Clk., until March 28 for constructing 27,000 sq. yds. brick pavement and 5,000 lin. ft. cement curb during the present year.

FT. LEAVENWORTH, KAN.—Bids are asked until March 29 by Capt. James E. Normoyle, Constr. Q. M., Ft. Leavenworth, for laying granolithic walks, steps, curbs, and gutters.

LITTLE ROCK, ARK.—The MEMPHIS ASPHALT & PAVING CO., of Memphis, Tenn., has secured contract for paving West Ninth St. with asphalt, at $1.97 per sq. yd. The entire cost will be about $43,000.

DILLON, MONT.—Bids are being received by the County Commissioners for constructing county road from Polaris to Magnet.

SEATTLE, WASH.—We are officially advised that the following bids have been received for improving Fourth Ave. by paving, grading, etc.: C. T. Erickson, Seattle, $278,392; J. S. Hold, Seattle, $287,022, and Pederson & McKinnon, Seattle, $321,909. Contract will probably be awarded to C. T. Erickson. R. H. Thomson is City Engr. Itemized bids will be given next week under Contract Prices.

Lewis & Willie, Inc., of Seattle, submitted the only bid received for regrading, etc., Jackson St., at $481,475, and will probably be awarded contract. Itemized bids will be given next week under Contract Prices.

SPOKANE, WASH.—The Western Trust & Investment Co. has awarded to JULIUS V. COSTELLO contract to grade, curb and park 15th and 16th Aves., between Division and Wall Sts., at $28,500. The contract awarded also includes excavations for water mains, which will be laid as soon as the streets are graded.

TACOMA, WASH.—KIBLER & JONES have been awarded contract for paving with sandstone blocks streets in local improvement district No. 327, at $80,930. Frank L. Davis is City Engr.

SALEM, ORE.—Bids were received March 15 at the office of James Knox Taylor, Supervising Arch. of the Treasury, Washington, D. C., for improvements on the grounds of the post-office at Salem, Ore. Bids were: Charles A. Gray, Salem, Ore., $15,280, Sept. 1, 1907; Headrick & Hughes, Salem, Ore., $12,870, July 1; Hiram M. Eley, Salem, Ore., $16,736, Sept. 15.

PASADENA, CAL.—THOMPSON & BANTANVILLE were low bidders and have been awarded contract to improve Olcott Pl., as follows: Grading, 3½ cts. per sq. ft.; cement curb, 23 cts. per lin. ft.; cement gutter, 13½ cts. per sq. ft. and oiling with crude mineral oil, 2½ cts. per sq. ft.; for laying cement sidewalk in Euclid Ave. at 10½ cts. per sq. ft., and in Congress St., at 9½ cts. per sq. ft. The HILLSIDE CONSTRUCTION CO. has contract for grading Logan St. at 2¼ cts. per sq. ft.; cement curb, 22½ cts. per lin. ft.; cement gutter, 11 cts. per lin. ft.; oiling with crude mineral oil, 2½ cts. per sq. ft.; also for grading Los Robles Ave. at 19 cts. per sq. yd.; cement curb, 25 cts., and gutter, 12½ cts. per lin. ft.; and oiling at 0.87. cts. per sq. ft. C. E. CHAMBERLAIN has contract to construct 8-in. vitrified pipe sewer in Garfield Ave. and other streets, 208 6 × 8-in. Y's, etc., at 80½ cts. per lin. ft., and J. J. BERRAY to construct cement sidewalks on California St. at 10½ cts. per sq. ft. Herman Dyer is City Clk.

WINDSOR, ONT.—See under Miscellaneous Contracts; Broken Stone.

REGINA, SASK.—The City Council has let contract for 70,650 sq. yds. of permanent sidewalks to be laid this year, as follows: BITULITHIC & CONTRACTING CO., Winnipeg, Man., $31,250 yds; KETTLE RIVER QUARRIES CO., 19,600 sq. yds. Prices per sq. yd. are: $3.37 for bitulithic, $3 for creosote blocks, $3.96 for asphalt. Bids will soon be asked for laying curbs and gutters. Estimated cost, $250,248. J. Kelso Hunter is Secy.-Treas.

## MANUFACTURING PLANTS.

*The names of parties awarded contracts are printed in capital letters.*

NEW BEDFORD, MASS.—The contract to build the new Gosnold weave mill of the New England Cotton Yarn Co., 141 Milk St., Boston, Mass., has been awarded to J. W. BISHOP & CO., of Providence. F. B. Sheldon, of Providence, is Arch. The dimensions of the building are 160x170 ft. The new mill is to be erected to the east of the old mill, where some storage sheds were recently torn down, and work will be started immediately. The mill will be one story, built of brick and will have the saw tooth roof construction.

NEWPORT, R. I.—The Bureau of Ordnance, Navy Dept., Washington, D. C., has finished plans and specifications for the construction of a torpedo factory at the Newport Naval Station. Advertisements are to be issued at once and a contract let, with the proviso that no work be commenced before July 1. At that time the amount of $155,000 appropriated for the work will become available. It is proposed at this factory to make every part of the torpedo except the steel flasks containing the compressed air used to drive the engines. The Ordnance Bureau has been conducting extensive experiments as result of which they have developed a torpedo that will attain the speed of 35 knots per hour under water at a distance of 1,000 yds., as against the present speed of 26½ knots.

WOONSOCKET, R. I.—We are officially advised that contract for constructing factory building for the Montrose Woolen Co., Woonsocket, has been let to J. W. BISHOP & CO. The structure will be of brick construction, 55x280 ft., and three stories high. Jacob H. Hary is Pres.

BRIDGEPORT, CONN.—It is reported that CASPER RANGER, of Holyoke, has contract for the erection of two of the proposed new buildings at the plant of the Union Metallic Cartridge Co., East Washington Ave. The contract for the remaining structure will be awarded later. The plans call for buildings three and four stories high, of brick. Samuel Green, of Holyoke, is Engr. The Union Metallic Cartridge Co. will construct an industrial railway in order to transport powder from its plant to its magazines which are located in the northern part of the town.

BRISTOL, CONN.—The New Departure Mfg. Co., manufacturers of bicycle brakes, trolley harps, ball bearings, etc., will erect a 4-story addition, 200x60 ft., to cost about $65,000. A 300-HP. gas engine will be installed and extra space will be provided for an additional 300 HP. A. E. Greene, of Bristol, is Des. Engr.

OLEAN, N. Y.—The Alcohol Refinery Co., it is reported, will build a plant here to cost about $200,000. The building will be erected on a site facing both the Erie and Pennsylvania railroads. John Troy, Olean, is Pres.

COHOES, N. Y.—A yarn mill is shortly to be erected at the corner of Oneida and Saratoga Sts., by the Fuld & Hatch Knitting Co., Hamilton and Liberty Sts., Albany. The plant will be run by power furnished by the Cohoes Co.

MASSENA, N. Y.—The contract for the construction of a 1-story foundry 99x53 ft., and 1-story machine shop, 115x58 ft., for the Racquette Foundry & Machine Co., at Massena, has been awarded to C. D. HODGE & CO., of Watertown. The buildings are to be brick and steel. The machine shop will be operated by electric power, furnished by the Aluminum Co. of America, Massena.

BUFFALO, N. Y.—The Buffalo Weaving & Belting Co., 234 Chandler St., will build a 3-story cotton mill on Chandler St., at a cost of $35,000.

The J. P. Devine Co., manufacturers of vacuum drying and impregnating apparatus, has purchased a site at Ferry St., Sheridan Ave. and the New York Central Belt Line tracks, having a frontage of 449 ft., upon which it will commence at once the construction of a new plant.

TROY, N. Y.—We are officially advised that the C. P. BOLAND CO., Times Bldg., Troy, N. Y., has been awarded contract for constructing a 4-story and basement factory building, to be erected by William H. Tolhurst, north of the present machine shop buildings of William H. Tolhurst & Son, corner Fulton St. and Sixth Ave., Troy. The structure will be of brick, concrete and mill construction.

TACONY (Philadelphia post-office), PA.—Heacock & Hokanson, Bailey Bldg., Philadelphia, have plans ready for bids for an addition to factory, at Tacony, for the Miller Lock Co. The building will be four stories high, 110x100 ft., brick, with slag roof, open plumbing, electric light fixtures, etc.

PHILADELPHIA, PA.—Contract for constructing factory at J and Staugh Sts., for the Walker Mfg. Co., has been awarded to SMITH-HARDICAN CO., Perry Bldg. The building will be of brick and two stories high.

Plans are being prepared by Ballinger & Perrot, 1200 Chestnut St., for a drug manufacturing plant at 105 Nor... Smith, Kline & French... build a 7-story and base... storage building at a cost ... properties are at the sou... Fifth and Appletree Sts., a... age of 91 ft. on Fifth St. a... ft. The new building will ... present building of the dru... 435 Arch St. It will be of ... crete frame, with a granite ... cotta superstructure. The ... will be on Fifth St.

PHILADELPHIA, PA.—Ba... Archs., 1200 Chestnut St... have awarded contract to R... erecting a warehouse and ... erected on the west side of ... Locust St., for the Hires-Tu... 626 Arch St. The building ... on 30th St. and extends to ... ft. It will have two stories ... Walls will be of Bridgewa... bluestone trimmings. Colum... roof construction will be of ... wood construction. Window... fronts will be protected with ... metal frames. Work will be ... once.

Milligan & Webber, Archs... St., have plans ready for bi... story factory and store buildi... nut St., for Mershon Bros. ... crete will be used for con... slag roof, open plumbing, pla... tric light fixtures, etc.

ERIE, PA.—The General E... Schenectady, N. Y., has purch... at Erie, and will build a large... place. The land extends fr... Shore & Michigan Southern ... Erie. Work on the buildings ... in the spring. It is the int... company to use 400 acres of ... the erection of comfortable h... employees.

BALTIMORE, MD.—J. S. Y... Boston and Ellicott St., have ... Charles M. Anderson, Arch., ... Charles St., it is reported, to ... and specifications for the erecti... house and plant to manufacture ... One structure to be 219x50 ft., ... high, with an extension 36x50 ft. ... building. Adams & Schwab, ... Bldg., have been appointed ... the installation of mechanical ...

The Guth Chocolate Co., 1430 Pennsylvania Ave., will erect a 4-story building to be used as a candy factory, on Wilmer alley, in the rear of its present site. The structure is to be 44x45 ft., and will cost $7,500. The contract for the work has been awarded to Mr. E. E. BLACKMAN.

The Canton Co. has awarded contract to B. F. BENNETT, 123 South Howard St., for the erection of its proposed 4-story packing plant to be erected at 2231 Boston St. The structure will be occupied by W. W. Boyer & Co., 605 South Luzerne St.

BALTIMORE, MD.—See under Light and Power Plants.

WINSTON-SALEM, N. C.—Winston Vehicle Co. has awarded contract to J. W. BURGE to construct 4-story factory building, 60x124 ft., plans for which have been prepared by Smith, Carrier & Northrup. J. O. White is Pres., and Henry Roan Secy. of company.

JACKSONVILLE, FLA.—The Florida Bag Mfg. Co. will erect a 2-story brick building, 55x150 ft. J. R. Bliven, 403 Main St., is Arch.

BIRMINGHAM, ALA.—Southern Sewer Pipe Co. will erect an addition and install new machinery in order to provide for doubling its manufacturing facilities.

SHREVEPORT, LA.—The Queen City Furniture Co., Ltd., will establish mattress factory and build dry-kiln and additional warehouses. About $25,000 will be invested. R. E. Ratcliff, P. O. Box 411, is Supt.

NEW ORLEANS, LA.—GEORGE J. GLOVER has contract to erect the 5-story building for the Louisiana Molasses Co., costing about $40,000. Emile Weil, 219 Carondelet St., is Arch.

STANTON, KY.—The Patrick Cement Co. will establish a Portland cement plant near Stanton, which will cost about $... and will have 300 bbls. daily capacity. J. C. Patrick is Pres.

LOUISVILLE, KY.—Grocers' Ice Co. will erect a 3-story brick building at a cost of $26,000, to be equipped as ice and cold-storage plant.

CINCINNATI, OHIO.—The Samuel C. Tatum Co. is having plans prepared for a plant, including a foundry 110x... ft. and pattern storage buildings. The main building will be 366 ft. long, four stories and basement.

FAIRMOUNT, IND.—The T. A. Snider Preserve Co., of Cincinnati, Ohio, will erect a canning factory here, 150x300 ft., of concrete blocks, cement floors, composition roofing, tile interior, and complete canning and preserving apparatus will be installed. It will erect a storage warehouse, also 100x150 ft., same construction.

INDIANAPOLIS, IND.—The INSLEY IRON WORKS CO. has been awarded the contract for the construction of a large addition to the Shandler & Taylor Boiler Factory on South Addison St.

HUNTINGTON, IND.—James Garretson is asking for bids for the construction of a creamery plant, two barns, and two silos, on the site of similar buildings recently destroyed by fire.

CALUMET, MICH.—Ten more charcoal kilns are to be built at the Manistique furnace plant by the Burnell Chemical Co., which will make a battery of 94. Construction work will be started April 1.

CHICAGO, ILL.—F. E. Gatterdam, Arch., 99 Metropolitan Block, has been retained to make plans for a brewery to be built at 22d St. and Spaulding Ave. for the New Brewery. It will comprise a 5-story brew house, 42x46 ft., of slow-burning construction with reinforced concrete floors, concrete

foundation ... -story cellar, 44x120 ft., of similar con... ction; a 2-story office and flat buildi... 2-story stable, to accommodate 20 h... wagon sheds, and an electric light and ... plant. The buildings will have stock ... exteriors, with pressed brick trim, ... composition roofs, and the plant will ... all the latest improvements and appli... It will have a capacity of 80,000 bbl... nd will cost $160,000. The plans will ... eady in about a month.

PORTAGE, WIS.—GATTERDAL & SIBBET, of ... co, have been awarded the contract f... e erection of the $75,000 brewing l... for the Eulberg Bros. Co., at Portage. ... ing will be 5-story, brick and steel, 120 ... ft.

KENOSHA, WIS.—The Peter Pirsch Co., manufacturer ... of fire department apparatus, has decided ... erect a $12,000 brick plant in this city. ... 4x132 ft.

ARMOURDALE, KAN.—A... LE (Kansas City post-office), Island & ... Hawk, Arch., Chicago, Rock figures for ... ific Ry. Co., Chicago, is taking building, ... oundhouse, coal chute, shop built at A... ney, storehouse, etc., to be ... rdale, for said railroad. Cost, $100,000.

ST. LOUIS, MO.—T. C. Link, 308 North Sixth St., ... reparing plans for a shoe factory for ... oberts, Johnson & Rand Shoe Co., Tenth ... Washington Sts., St. Louis. Estimated ... $100,000.

ARKADELPHIA, ARK.—The Arkadelphia Roller Mill Co. has decided to build a planing and ... working mill, with stave mill, barrel factory and sawmill in connection.

LOS ANGELES, CAL.—The BARBER-BRADLEY CONSTRUCTION CO. is reported to have ... let contract by the Talbert-Whitmore Co., 3410 South Main St., to erect a manufacturing plant at 2620 Lacy St., to consist of a 1-story brick building, 50 × 100 ft., for offices and shipping rooms; a 2-story brick building, 23 × 206 ft., for factory purposes, and an engine room. The foundations and footings are to be of concrete and the interior of heavy mill construction. A blower system of ventilating and heating is to be installed, also machinery for the manufacture of shade cloth and shades. The buildings are to cost about $24,000.

ST. STEPHEN, N. B.—Bids will be asked for shortly for erecting a steel and concrete sawmill, 40 × 147 ft., for the St. George Pulp Co.

MONTREAL, QUE.—The Mount Royal Spinning Co., Ltd., will construct a cotton mill in Cote St. Paul, on the south side of the Lachine Canal near the Victoria Bridge. Twelve acres of land have been secured, and the company proposes erecting no less than five buildings. The main spinning mill will be four stories high, and will measure 350 × 120 ft. The other four or five buildings will be two stories. The property, which has just been secured by the Mount Royal Spinning Co., Ltd., measures 800 ft. on the canal, and will have a depth of about 900 ft.

HAMILTON, ONT.—The Canada Screw Co. has been incorporated here with a capital of $2,500,000 and has secured a site for a factory. The directors are: C. A. Birge, Charles Alexander, F. H. Wilton, J. O. Callaghan, W. F. Coote, C. S. Wilcox and Hon. William Gibson.

KENORA, ONT.—The Canadian Pacific Ry. Co. has decided to erect an engine house here at a cost of $100,000. F. P. Brady, North Bay, Ont., is Gen. Supt.

VICTORIA, B. C.—The Brackman-Kerr Milling Co. has instructed F. M. Rattenbury, Five Sisters Block, Victoria, to prepare plans for a 2-story brick building, 80 × 105 ft., to be erected on Brock St. at a cost of $25,000.

## MISCELLANEOUS CONTRACTS.

U. S. RECLAMATION SERVICE.—All news relative to canal projects, etc., will be found under Water Supply—Irrigation.

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DREDGING.—Detroit, Mich.—Bids are asked until 3 p. m., March 28, by Maj. Charles Keller, U. S. Engrs., for dredging mouth of Black River, Mich.

DREDGE.—Toronto, Ont.—The Board of Control has accepted the bid of the POLSON IRON WORKS, Toronto, to supply the city with an hydraulic dredge. Cost, $72,000.

CEMENT.—Hamilton, Ont.—The OWEN SOUND PORTLAND CEMENT CO., Owen Sound, Ont., has been awarded the contract for the supply of 20,000 barrels of cement for the city of Hamilton.

DREDGING.—Washington, D. C.—Bids are asked until 2 p. m., April 2, for dredging a channel at the Little Egg (New Jersey) Life-saving Station. S. I. Kimball, Gen. Supt., Life Saving Service, Treasury Dept.

GRADING, TEAM WORK.—New York, N. Y.—From 50,000 to 75,000 yds. grading to let on Long Island. Can commence work April 1. Address "F. A. 12," Engineering News. (Advertised, Engineering News.)

CEMENT.—Columbus, Ohio.—The State Board of Public Works has awarded the contract for 14,500 barrels of cement for canal improvements to the AMERICAN SEWER PIPE CO. at from $1.56 to $1.68 per barrel.

CHESS WAGONS.—Washington, D. C.—Bids are asked until noon, April 13, for furnishing and delivering chess wagons for pontoon trains, at Washington Barracks. Maj. E. Eveleth Winslow, Engrs. (Advertised, Engineering News.)

STEEL TUGS.—Toronto, Ont.—The Department of Marine and Fisheries, Ottawa, has awarded a contract to the POLSON IRON WORKS, Toronto, for two steel tugs 80 ft. long, one for use on the Rideau River, and the other for the Trent Valley Canal, Peterboro, Ont.

CEMENT.—Montrose, Colo.—Bids are asked until 3 p. m., April 15, by the U. S. Reclamation Service, for furnishing 30,000 bbls. of Portland cement, f. o. b. cars at manufacturer's shipping point. J. R. Garfield, Secy. Dept. Interior. (Advertised, Engineering News.)

PILE DOCK.—New York, N. Y.—Bids are asked until noon, April 8, for building a pile dock at Fort Wadsworth, N. Y. Lieut.-Col. W. L. Marshall, Corps Engrs., Army Bldg. (Advertised, Engineering News.)

MOORING STONES.—Portland, Me.—Bids are asked until noon, March 28, for furnishing mooring stones for use in the 1st Light-House District, for the fiscal year ending June 30, 1908, to Comdr. John D. McDonald, U. S. N., Inspector.

NAVAL SUPPLIES.—Washington, D. C.—Bids are asked by the Bureau of Supplies and Accounts, Navy Dept., until 10 a. m., March 26, for furnishing engineering supplies at several navy yards. E. B. Rogers, Paymaster-Gen., U. S. N.

DREDGING.—Superior, Wis.—The Philadelphia & Reading Coal Co. has awarded the contract for the dredging for the company's new dock on Superior Bay to the DULUTH & SUPERIOR DREDGING CO. The entire cost will be about $500,000.

MONUMENT.—New York, N. Y.—Contract for building a monument to the prison ship martyrs in Fort Greene Park, Brooklyn, has been awarded to P. J. CARLIN & CO., Brooklyn, at $172,000. McKim, Mead & White, Archs., 160 Fifth Ave., New York.

BEAR-TRAP GATES.—Wheeling, W. Va.—Bids are asked until 11 a. m., April 15, for furnishing and delivering structural steel, iron and steel castings, etc., for bear-trap gates for Dam No. 18, Ohio River. Capt. F. C. Boggs, U. S. Engrs. (Advertised, Engineering News.)

TUNNEL.—Boston, Mass.—Bids are asked by the Boston Transit Commission, B. Leighton Beal, Secy., until noon, April 4, for constructing Section 6 of the Washington St. tunnel, near the old state house. The structure will be mainly of steel and concrete. (Advertised, Engineering News.)

LOCK-GATE MACHINERY.—Boston, Mass.—Bids were received March 18 for furnishing and erecting the machinery for operating two rolling caisson lock-gates as follows: Henry S. Pritchett is Chn. Charles River Basin Commission: Monad Engineering Co., $13,970; Link Belt Machinery Co., Chicago, Ill., $12,750.

BROKEN STONE.—Windsor, Ont.—Bids are asked until noon, April 2, for supplying the city of Windsor with 12,000 tons, more or less, of broken stone for macadamizing streets, the same to be delivered f. o. b. cars in such railway yard within the city as the Council may direct. Stephen Lusted, City Clerk.

COAL HANDLING MACHINERY.—Philadelphia, Pa.—Bids are asked until noon, March 28, for coal handling machinery for the Torresdale Pumping Station. John R. Hathaway, Dir. Dept. of Public Works. Specifications and bidding sheet are on file at office of Engineering News, New York. (Advertised, Engineering News.)

CEMENT.—Huntley, Mont.—Only bid received on March 12 by the U. S. Reclamation Service for Portland cement for Shoshone Project, Wyo., and North Platte Project, Neb., was submitted by the Universal Portland Cement Co., by Edward M. Hagar, Pres., for 25,000, 35,000 or 55,000 bbls., in cloth sacks, not including sacks, f. o. b. manufacturer's works, South Chicago, Ill., at $1.50 a bbl.

CONCRETE QUAY WALL.—Key West, Fla.—Edwin S. Johnson, of Miami, Office Engr. Florida & Coast Ry. Co., states that all bids opened on Jan. 17 for the construction of the concrete quay wall and fill on the Key West extension, have been rejected, and the work will be done by company's force, under direction of J. C. Meredith, Constructing Engr., Miami. The lowest bid for this work was $578,358.

CABLE, FIRE ALARM BOXES.—New York, N. Y.—Bids are asked by Francis J. Lantry, Fire Comr., until 10.30 a. m., March 27, for furnishing and delivering underground and submarine cable in Manhattan and Bronx Boroughs. Bids will be received at same time for furnishing and delivering beam and truss ladders in Manhattan and Bronx Boroughs, and for furnishing and delivering 100 fire alarm boxes in Borough of Richmond.

WHARF.—Charlottetown, P. E. I.—Bids will be received until April 11 by D. Pottinger, Moncton, N. B., Gen. Mgr., Intercolonial Ry., for an extension to the Government railway wharf at Charlottetown. L. K. Jones, Secy. Dept. Rys. and Canals, Ottawa, Ont.

The contract for the new government wharf at Baddeck, Cape Breton, has been awarded to HUGH MACDONALD, of North Sydney, at $12,000.

TUNNELS, APPROACHES AND BRIDGE SUBSTRUCTURES.—Long Island City, N. Y.—Bids are asked by the Pennsylvania, New York & Long Island R. R. Co., 85 Cedar St., New York, until noon, April 22, for construction of tunnels and approaches and bridge substructures between points near East Ave. and Thomson Ave., Long Island City. Plans and specifications will be furnished intending bidders upon payment of $25. Samuel Rea, Vice-Pres. (Advertised, Engineering News.)

COAL HANDLING MACHINERY.—Toledo, Ohio.—M. S. Connors, Gen. Supt. of the Hocking Valley Ry., Columbus, Ohio, states that this company is preparing to make extensive improvements in coal handling facilities on the Toledo docks. The company has placed an order with the McMYLER MACHINE CO., of Cleveland, for coal handling machinery that will cost about $75,000. The new machinery is to be installed at the close of navigation next fall. It will replace one of the present Brown hoist machines, which will be taken down. The new machine will handle 50-ton coal cars.

TUG.—Washington, D. C.—Bids are asked until 2 p. m., April 4, at the office of the Revenue Cutter Service, Treasury Dept., Washington, D. C., for the construction and delivery at the works of the successful bidder of an ocean-going tug, to be known during construction as Revenue Cutter No. 16. Bids on this tug have been opened twice before, but rejected both times because in excess of the appropriation. Since the last bidding, an additional appropriation of $35,000 has been secured from Congress, making about $190,000 now available.

REMOVING BEDROCK.—Detroit, Mich.—Bids were received on March 18 by Col. Charles E. L. B. Davis, U. S. Engrs., for removing limestone bedrock from Item B, Lime Kiln Crossing, Detroit River, as follows: DUNBAR & SULLIVAN DREDGING CO., Buffalo, N. Y., $3.80 a cu. yd.; Hickler Brothers, Sault Ste. Marie, Mich., $4.25 a cu. yd.; G. H. Breymann & Bros, Toledo, Ohio, $4.90 a cu. yd.; Great Lakes Dredge & Dock Co., Chicago, Ill., $5.25 a cu. yd. Contract was awarded to the Dunbar & Sullivan Co. for 62,000 cu. yds. at full rate and 78,500 at half rate.

SIDEWALKS, MONUMENTS.—Fort Worth, Tex.—Bids are asked by the City Secy. of North Fort Worth, Tex., until April 6 for "supplying items 1, 2 and 3 named in Volume 50, page 28, of Engineering News. Approximately 800 ¾-in. galvanized iron pipe capped monuments will be required placed at block corners at grade. An accurate map 200 ft. to one inch is owned by the city available for contours." [The items referred to above are given as follows in issue of July 9, 1903—vol. 50, p. 28: (1) A contour map on a scale of 200 ft. to an inch; (2) a profile of each street showing ground surface elevations, elevations of door steps at property line, sidewalk elevations (old), and a grade line for each block; (3) a list and description of bench marks.] (Advertised, Engineering News.)

CEMENT AND SAND.—Washington, D. C.—Bids were opened on March 13, at the office of Bernard R. Green, Superintendent of Construction of the new National Museum Building, Washington, D. C., for between 4,000 and 6,000 bbls. of Portland cement, and 4,000 cu. yds. of sand. The bids on cement were: Wm. Wirt Clark & Son, Baltimore, Md., $2 per bbl. until July 1, 1907; $2.05 after July 1; 7 cts. for return of sacks. J. G. WATERS & SONS, Washington, D. C., $1.71, Lehigh cement; 7¼ cts. for sacks (awarded contract). T. E. Clark, Washington, $1.83, Edison or Whitehall cement. Grove Lime & Coal Co., Washington, $1.73, Alpha cement. Atlas Portland Cement Co., Washington, D. C., $1.92; 7½ cts. for sacks. National Mortar Co., Washington, $1.73, Dragon cement. Bids on sand were: L. E. SMOOT, foot of Third St., S. E., Washington, 90 cts. per cu. yd. (awarded contract). Columbia National Sand Dredging Co., Washington, $1.

SUBWAY.—New York, N. Y.—Bids will be received until noon, April 11, by the Rapid Transit Commission, according to the "Tribune," for building the Centre St. section of the proposed bridge loop subway. "The bridge loop system, being a small construction proposition, is under way ahead of the other two subways. The regulations governing the bidding are unusually strict. No proposal can be withdrawn after it has been deposited with the Board of Rapid Transit Commissioners. The award of the contract is to be made within ten days after the opening of the proposals. The successful bidder must file a bond in the sum of $300,000. No proposal will be received unless it is accompanied by a certified check, made payable to the Controller, in the sum of $25,000. The bridge loop subway is to be built in three sections, and the section to be advertised on Saturday is the most difficult of the three. It extends from Pearl to Canal Sts. The bridge subway is known to the engineers as route No. 9. Ultimately it will include Delancey, Grand, Desbrosses, Canal and William Sts., in Manhattan, and Fulton St., Lafayette Ave. and Broadway in Brooklyn. There is to be a station between Leonard and White Sts. The excavation is to be almost wholly under cover. The Pearl St. end of the subway will abut on the northern end of the proposed new bridge terminal, plans for which were adopted last year. The Brooklyn elevated trains, after running through the Centre St. subway, will enter the bridge terminal and climb a steep grade to the bridge tracks. The plans for the Centre St. section of the subway to be advertised on Saturday call for the building of pipe galleries. The disposition of the gas, water and electric pipes in these galleries will afford a demonstration of the practicability of having pipe galleries in all future subways."

CANAL CONTRACTS.—Columbus, Ohio.—The State Board of Public Works on March 13 awarded contracts for improvements on the Miami and Erie and the Ohio and Erie Canal from Akron to Tuscarawas, as follows: Miami and Erie—Rebuilding Locks Nos. 30 and 31, FRANK DAVIS, Hamilton, $2,755; rebuilding Locks Nos. 28 and 29, ADAM KOENIG & SONS, Reading, $4,458; rebuilding Locks Nos. 24, 26 and 27, and resetting and constructing concrete coping at Locks Nos. 23 and 25, FAUVER & RENICK, Dayton, $5,214; building blue bend and mill wastage, ADAM KOENIG & SON, $1,025; constructing Holwigger submerged culvert, OBERLE & STRAYER, $2,913; rebuilding Lock No. 34, SCHNEIDER BROS., Defiance, $6,599; repairing Independence Dam, SCHNEIDER BROTHERS, $1,042; constructing concrete dam across Maumee River at Grand Rapids, JOHN WEENEKERLY, Whitehouse, $11,280. The board rejected the bids for rebuilding Locks Nos. 49 and 52 at Toledo on account of a lack of funds, and the bids for furnishing cast iron culvert pipe on board cars at Melrose were not considered.

Ohio and Erie Canal.—Rebuilding Barberton Lock, JAMES WILDES, Akron, $2,777; abutments for Wolf Creek aqueduct, BURNS & EAGLE, Cleveland, $2,580; rebuilding upper lock at Clinton, S. W. PARSHAL, Akron, $3,066; lower lock at Clinton, JAMES WILDES, Akron, $3,052; Lock No. 4, FAUVER & RENICK, Dayton, $2,533. This same firm will also construct Lock No. 7 for $2,934; Lock No. 8, $2,574; Lock No. 9, $2,750; Lock No. 12, FAUVER & RENICK, at a cost of $2,832; Lock No. 12, FAUVER & RENICK, $2,854; Lock No. 13, S. W. PARSHAL, $3,725; Lock No. 14, H. MINNICK, Tuscarawas, $3,030; and Lock No. 15, J. N. KISNER, West Lafayette, $3,388. The contract for cement was held over for further consideration. The work is to be completed by Sept. 1, 1907.

## U. S. POSSESSIONS AND CUBA.

*The names of parties awarded contracts are printed in capital letters.*

ENGINEERING SUPPLIES.—Panama.—Bids are asked until 10.30 a. m., April 2, under Circular No. 356, by David W. Ross, Gen. Purchasing Officer, Isthmian Canal Commission, Washington, D. C., for engineering supplies, as follows: Six pneumatic rivet hammers, with spare and duplicate parts; two pneumatic drills; merchant bar iron or soft steel; soft-steel plates; steel angle bars; round soft-steel bars, commercial lengths; 200,000 lbs. track spikes; 60,000 lbs. track bolts; machine bolts, carriage bolts; wrought cut washers; nuts; screws; 135,000 ft. extra-heavy black-iron pipe and fittings; brass and iron-body gate valves; copper gaskets; bibbs, anvils, axes, sledges, picks, chisels, tackle blocks, snatch blocks; 2,800 ft. leather belting; 3,000 yds. cotton duck; 10,000 ft. fire hose, 2½-in., etc.

STEEL, COPPER.—Panama.—Bids were received March 12 by David W. Ross, Gen. Purchasing Officer, Isthmian Canal Commission, Washington, D. C., for furnishing a very large quantity of merchant bar iron or soft steel and 40,000 lbs. of ingot copper. The bids on steel were: Bethlehem Steel Co., South Bethlehem, Pa., $202,865, 25 to 310 days. Crucible Steel Co. of America, Pittsburg, Pa., part, $128,779. U. S. STEEL PRODUCTS EXPORTS CO., 24 State St., New York, $175,600; 60 to 160 days (awarded contract). Motley, Green & Co., New York, on foreign materials, $153,343; commence delivery 45 days.

Bids on copper were: James Clendenin, Thames and Caroline Sts., Baltimore, $10,340; NASSAU SMELTING & REFINING WORKS, 603 West 29th St., New York, $10,320 (awarded contract); H. E. Boucher Mfg. Co., 91 Maiden Lane, New York, $10,500. Fox Bros. & Co., 126 Lafayette St., New York, $11,600.

STEAM SHOVELS.—Panama.—Bids were opened March 18, at the office of David W. Ross, Gen. Purchasing Officer, Isthmian Canal Commission, Washington, D. C., for 22 steam shovels, under Circular No. 354. Bids were asked on Class 1, 15 steam shovels, type "B," not less than 95 nor more than 100 tons, and on Class 2, seven steam shovels, type "C," not less than 40 nor more than 50 tons, in weight. Bids were: Atlantic Equipment Co., 111 Broadway, New York, Class 1, $14,300 each; total, $214,500. Colon delivery; $11,900 each; total, $178,500. New York delivery; shipment, 150-160 days: Bucyrus Co., South Milwaukee, Wis., Class 1, $12,468 each; total, $187,025, on 95-ton shovels; $11,950 each; total, $179,250, on 95-X Bucyrus shovels; Class 2, $7,000 each; total, $49,000; all deliveries, Colon. Time, commence shipment on class one or two, or both, July 28, 1907; one shovel each week thereafter. Marion Steam Shovel Co., Marion, Ohio, Class 1, $14,631 each; total, $219,468; Class 2, $8,842; total, $61,897; alternate, Class 2, on model No. 20, $6,462; total, $45,237. Shipment, 105 to 225 days.

POWER PLANT.—Panama.—Bids are asked until 10.30 p. m., April 2, at the office of David W. Ross, Gen. Purchasing Officer, Isthmian Canal Commission, Washington, D. C., for power plant for the projected quarrying—rock-crushing—and shipping plant at Porto Bello, C. Z. The plant will be placed on a side hill with the engine room floor about 18 ft. above and 18 ft. back from the water line of the Carribean Sea. It will furnish power to operate drills in the quarry—crushers, screens, conveyors, etc., in the crusher plant, and electric light and power for the whole plant and adjacent quarry and camp. It is expected that the crushers, screens and conveyors, all driven from main engine, will require, including losses and friction, not to exceed 450 HP. uniform load, air compressor about 200 HP., and electric generator, 100 HP., all three to run condensing. Proposals will be received for furnishing the whole or any part of the following items: One air compressor and air receiver; one generator and engine, direct-connected, A. L. Ide & Sons, or equal; one switchboard, complete; one surface condenser with independent air and circulating pumps; one water-service pump; two boiler-feed pumps; one grease extractor; one feed-water heater; four water-tube boilers, with breechings and stack, all as specified in Circular No. 354.

IRON PIPE, ETC.—Panama.—Bids were opened March 18 at the office of David W. Ross, Gen. Purchasing Officer, Isthmian Canal Commission, Washington, D. C., for iron pipe, etc., under circular No. 354, as follows: (a) Conehead and countersunk rivets; (b) 107,100 ft. w.-i. pipe, sizes ⅝-in. to 12-in.; (c) 10,000 globe and gate valves. Bids were: H. A. Lanman, Columbus, Ohio, (a) $10,042; 90 days. J. Edward Ogden Co., 147 Cedar St., New York, $10,519; no time stated. Oliver Iron & Steel Co., Pittsburg (a part), $7,922, 60 days. Allegheny Forging Co., Pittsburg, $10,568; no time stated. Bridgman Bros. Co., 1428 Washington Ave., Philadelphia, (b) $33,710; (c part) $3,135; 135 days. Central Metal & Supply Co., Baltimore, (c part) $10,882; 90 days. Crane Co., 624 West Pratt St., Baltimore, (c) $20,680; 120 days. Cuyler & Mohler, 611 William St., Baltimore, (c part) $3,265; no time. E. F. Keating Co., 435 Water St., New York, (b) $27,587; 90 days; (c part) $3,231; 60 days. Kennedy Valve Mfg. Co., 57 Beekman St., New York, (c) part) $2,997; 75 days. Ludlow Valve Mfg. Co., Troy, N. Y., (c part) $5,340; 150 days. Lunkenheimer Co., Cincinnati, Ohio, (c) $31,128; 180 days. Manhattan Supply Co., 127 Franklin St., New York, (c) $22,709; 90 days. Manning, Maxwell & Moore, 85 Liberty St., New York, (c part) $46,894. Wm. Powell Co., 2525 Spring Grove Ave., Cincinnati, Ohio, (c part) $18,174; 1 to 150 days. U. S. Steel Products Export Co., 24 State St., New York, (b) $27,688; 150 days; (c part) $13,731.

## CONTRACT PRICES.

[Where (*) precedes items under Contract Prices the work was advertised in Engineering News.]

*RECLAMATION CANALS AND DITCHES.—Williston, N. Dak.—Bids were received on March 5 by the U. S. Reclamation Service for construction of canals and ditches and pumping station, in connection with Buford-Trenton Project, N. Dak. The bidders were (A) John S. Penson, Williston; (B) John S. Penson and D. F. King, Williston; (C) James Burden, Delhi, Iowa:

| DIVISION "A." | (B) |
|---|---|
| 32,000 cu. yds. excavation, Class 1.. | $0.235 |
| 100 cu. yds. excavation, Class 2.. | .75 |
| 25 cu. yds. excavation, Class 3.. | 1.50 |
| 25 cu. yds. excavation, Class 4.. | 2.50 |
| 1 lin. mile 10 sec.-ft. canals.... | 340.00 |
| 9 lin. miles 5 sec.-ft. canals.... | 320.00 |
| 3 lin. miles waste-water ditches. | 260.00 |
| 10,000 cu. yds. overhaul..... | .035 |
| 25 cu. yds. puddling ..... | 1.00 |
| 80 cu. yds. riprap ..... | 4.00 |
| 40 cu. yds. concrete, Class 1.... | 9.00 |
| 110 cu. yds. concrete, Class 2.... | 13.00 |
| 2,500 ft. B. M. sheet piles, delivered | 50.00 |
| 800 lin. ft. sheet piles, driving.... | .50 |
| 2 bridges, 22-ft. span, complete. | 375.00 |
| 3 bridges, 20-ft. span, complete. | 350.00 |
| 1 bridge, 18-ft. span, complete.. | 320.00 |
| 1 bridge, 16-ft. span, complete.. | 265.00 |
| 1 bridge, 12-ft. span, complete.. | 210.00 |
| 1 bridge, 10-ft. span, complete.. | 165.00 |
| 1 bridge, 8-ft. span, complete.. | 130.00 |
| 2,200 ft. B. M. lumber, Class 1, flumes at 6-Mile Creek..... | 80.00 |
| 4,750 lbs. structural steel..... | .085 |
| 3,000 ft. B. M. lumber, Class 2, culverts ..... | 60.00 |
| 14,000 ft. B. M. lumber, Class 1, turnouts and drops ..... | 80.00 |
| 1,000 ft. B. M. lumber, Class 1, wooden gates, surfaced..... | 90.00 |
| 60 stop planks ..... | .80 |
| 5,000 ft. B. M. preserving lumber.. | 15.00 |
| 100 lin. ft. terra cotta pipe culverts, 4" cut or less, 12".... | 2.25 |
| 100 lin. ft. terra cotta pipe culverts, 4" cut or less, 15".... | 2.75 |
| 200 lin. ft. terra cotta pipe culverts, 4' cut or less, 18".... | 3.40 |
| Total ..... | $20,868 |

DIVISION "B."
(No bids were submitted.)

| DIVISION "C." | (C) |
|---|---|
| 5,000 cu. yds. pressure pipe, trenching and backfilling..... | $0.60 |
| 10 cu. yds. riprap ..... | 3.50 |
| 880 cu. yds. concrete, Class 2.... | 11.50 |
| 1,500 ft. B. M. sheet piles, delivered | 30.00 |
| 200 lin. ft. sheet piles, driving... | .30 |
| 1,500 ft. B. M. preserving lumber. | 15.00 |
| Total ..... | $13,282 |

| DIVISION "D." (Pumping Station.) | (A) |
|---|---|
| 130 cu. yds. excavation..... | $0.50 |
| 145 cu. yds. concrete, Class 1.... | 10.50 |
| 5,500 ft. B. M. lumber, Class 2.... | 65.00 |
| 2,000 ft. B. M. sheet piles, delivered | 50.00 |
| 450 lin. ft. sheet piles, driving... | .50 |
| 5,400 lbs. structural steel..... | .085 |
| 16 squares roofing ..... | 14.00 |
| 2,000 ft. B. M. preserving lumber.. | 15.00 |
| Millwork, hdwr, painting woodwork, lump sum ..... | 350.00 |
| Total ..... | $3,333 |

PAVING.—Seattle, Wash.—Bids were received as follows on Feb. 23 by C. B. Bagley, Secy. Bd. Public Works, for paving East Jefferson St.: (AA) Barber Asphalt Paving Co., 612 Mutual Life Bldg., Seattle; (BB) INDEPENDENT ASPHALT PAVING CO., 204 Pioneer Bldg., Seattle. (Contract has been awarded to this company. Also contract for maintenance on all asphalt paving for a period of ten years, at the rate of 2½c. per sq. yd. per year.)

| | (AA) | (BB) |
|---|---|---|
| Fixed estimate, $5,500.00. | $5,500.00 | $5,500.00 |
| Clearing and grubbing, lump sum ..... | 6,000.00 | 6,000.00 |
| Sub-grading 37,000 cu yds. ..... | .80 | .68 |
| 12" pipe sewer, 50 lin. ft. | 2.00 | 1.50 |
| Single inlets, 2..... | 25.00 | 15.00 |
| Catch-basins, single inlets, 10 ..... | 75.00 | 60.00 |
| Catch-basins, double inlets, 3 ..... | 90.00 | 65.00 |
| Curbing, straight concrete, 51,058 lin. ft... | .50 | .45 |
| Curbing, curved granite, 3,467 lin. ft..... | 2.00 | 1.87 |
| Curbing, curved concrete, 127 lin. ft..... | .45 | 6.0 |
| Sidewalk repairing, old lumber, 140 M. ft. B. M. | 5.50 | 2.50 |
| Sidewalk repairing, new lumber, 25 M. ft. B. M. | 25.00 | 25.00 |
| Sidewalk, repairing, concrete ..... | 1.60 | 1.40 |
| Asphalt pavement, 69,163 sq. yds. ..... | 2.10 | 2.08 |
| Sandstone pavement, 11,512 sq. yds..... | 4.20 | 3.87 |
| Concrete base, for each extra inch, 41,000 sq. yds. ..... | .20 | .20 |
| Brick gutters, 9,181 sq. yds. ..... | 3.10 | 2.87 |
| Wooden stops, 835 lin. ft. | .55 | .50 |
| Monument cases, 50..... | 10.00 | 8.00 |
| Alley crossings, concrete, 537 sq. yds..... | 2.10 | 1.50 |
| Catchbasins to be rebuilt, 35 ..... | 35.00 | 20.00 |
| Catch-basins and manhole covers, adjust, 103 | 3.00 | 2.00 |
| Inlets to be moved, 138.. | 5.00 | 2.50 |
| Fire hydrants, 15..... | 90.00 | 75.00 |
| Fire hydrants to be moved, 14 ..... | 15.00 | 20.00 |
| 6" c.-i. pipe hydrant connections, 300 lin. ft... | 1.25 | 1.30 |
| Brick gate chambers, 45. | 30.00 | 35.00 |
| ¾" galvanized iron pipe, 750 lin. ft..... | .30 | .30 |
| Totals..... | $315,031 | $297,163 |

## FOREIGN CONTRACTS.

WATER-WORKS.—Brazil.—The plan and estimate prepared by Dom José Mattoso Sampaio Corrêa, Civil Engr., for improving the water supply of Rio de Janeiro has been approved. The cost of the present scheme is estimated at 30,000,000 milreis ($16,380,000).

BUILDING.—Uruguay.—The Government has been authorized to spend 300,000 pesos ($310,000) on the construction of a building for the Faculty of Mathematics.

ELECTRIC POWER DEVELOPMENT.—Uruguay.—Authority has been granted to John Smith, of Montevideo, Uruguay, to study the best means of utilizing "El Salto" waterfalls on the River Uruguay, with a view to obtaining the maximum amount of electric power, and distributing it throughout various portions of the Republic.

RAILWAY.—Roumania.—Preliminary surveys will be made for a new railway from Bucharest to Fierbintzi, and probably will be extended to Urziceni. The total length will be about 40 miles. Cost will be about 8,000,000 francs (about $1,600,000).

RAILWAY.—Netherlands.—The "Nieuwe Rotterdamsche Courant" announces that the proposed electrification of the Groningen tramway system has been approved by the Communal Council; also that the "Nederlandsche Tramwegmaatschappij" has applied to the Communal Council of Leeuwarden for a loan of 40,000 florins (about $16,000) for the construction and working of a steam tramway 8.5 kilom. long, from Leeuwarden to Suameer by Hardegarijp and Hardegarijpterhoek.

According to the same paper the Flushing-Middleburg Tramway Co. is studying the plans for the construction of a steam tramway from Wolfaartsdijksch Veer to Goes and Barsch. A steam tramway is also proposed between Wijbie and Vaals via Gulpen.

RAILWAY.—Belgium.—Bids are asked by the "Société national des chemins de fer vicinaux" until March 27, at the offices of the "Société" at 14, Rue de la Science, Brussels: (1) For the construction of the section from Comblain-la-Tour to Xhoris of the Comblain-la-Tour-Manhay-Melreux local railway. The estimated cost of the work is 298,237 frs. ($53,000), and a deposit of 27,000 frs. ($5,400) is required to qualify any bid. Bids by registered letter will be received at the address mentioned above not later than March 26. (2) For the construction of the section from Chapelle-les-Herlaimont to Trazegnies (station) of the local railway from Chapelle-les-Herlaimont to Anderlues. The estimated cost of the work is 96,700 frs. ($19,000), and a deposit of 10,000 frs. ($2,000) is required to qualify any bid. A copy of the specification may be obtained on payment of 1 fr. in each case relating to (1) from M. L'Hoir, rue Edouard-Wacken, 10, Liége, and relating to (2) from M. Simon, rue d'Havré, No. 99, Mons.

## CIVIL SERVICE EXAMINATIONS.

ASSISTANT ENGINEER.—New York, N. Y.—The Municipal Civil Service Commission will hold an examination on May 8, at 10 a. m., for the position of Assistant Engineer in charge of section, Board of Water Supply. Appointments will be made for work outside the city. Certification will be made to the Board of Water Supply only. There will probably be a number of appointments. The examination is open to all citizens of the United States. The salary is $2,400 a year and over. Ten years' experience is necessary. Graduation from a technical school of recognized standing will count as two years' experience. A candidate must show at least two years of experience in charge of work or in a position in which he had some authority or responsibility. Statements of such experience will be subject to publication and must be furnished to the Board of Water Supply. In submitting statements of experience a candidate must show just what his connection has been with each piece of work and just what measure or responsibility rested upon him. The minimum age is 28 years. Frank A. Spencer, Secy. (Advertised, Engineering News.)

TOPOGRAPHICAL DRAFTSMAN.—New York, N. Y.—An examination will be held by the Municipal Civil Service Commission, 299 Broadway, on May 29, at 10 a. m., for the position of Topographical Draftsman. Applications will be received until 4 p. m., May 13. Vacancies exist in the Board of Water Supply. Salary $1,200 a year. Examination is open to all citizens of the United States. Frank A. Spencer, Secy. (Advertised, Engineering News.)

**For other Proposal Advertisements see pages 55, 56, 57, 58, of Advertisements and Construction News page 110.**

## SIDEWALKS.

N. Ft. Worth, Texas.

Bids will be received by the City Secretary of North Fort Worth, Texas, on or before April 6, 1907, for supplying items 1, 2 and 3 named in Volume 50, page 28, Engineering News. Approximately 800 ¾-inch galvanized iron pipe; capped monuments will be required placed at block corners at grade. An accurate map 200 feet to 1 inch is owned by the City available for contours. 12-2t

## SEWER SYSTEM AND SEPTIC TANK DISPOSAL.

Shelbyville, Ky.

Sealed proposal will be received by Camden W. Ballard, Secretary of Board of Sewer Commissioners of the City of Shelbyville, Ky., until 8.00 P. M., Tuesday, April 2d, 1907, for the construction of a system of sewers and septic tank for the City of Shelbyville, Ky.

The system of sewers consists of approximately 5 miles of sewers, varying in size from 6" to 15" 62 manholes, 14 lampholes and 6 flushtanks. The septic tank will be 92' × 34' × 8', constructed of concrete with reinforced concrete roof covered with 18" of earth.

Proposals for septic tank will be received separate from proposals for sewers.

Detail plans may be seen at the office of the Board of Sewer Commissioners, and instructions to bidders, specifications and bidding sheets obtained from the Secretary.

The right is reserved to reject any and all bids.

CAMDEN W. BALLARD, Secretary,
Board of Sewer Commissioners,
Shelbyville, Ky.

CHARLES E. COLLINS,
Consulting Engineer,
Philadelphia, Pa.

March 18, 1907. 12-1t

## CONSTRUCTION OF TUNNELS AND APPROACHES AND BRIDGE SUBSTRUCTURES IN LONG ISLAND CITY.

Pennsylvania, New York & Long Island Railroad, East River Division.
New York, N. Y.

Sealed proposals for the construction of tunnels and approaches and bridge substructures between points near East Avenue and points near Thomson Avenue, in Long Island City, will be received at the office of the Company at 85 Cedar Street, New York City, until 12 o'clock noon of the twenty-second day of April, 1907.

A copy of each of the following documents,
Instructions to Bidders,
Proposal,
Specifications,
Contract,
Contract Drawings,
will be furnished to intending bidders on written request, accompanied by a certified check for $25.00, the check to be payable to the order of the Pennsylvania, New York & Long Island Railroad Company and to be retained by the Company.

The documents above referred to will be furnished by the Chief Engineer at 1 West 34th Street, New York, N. Y. Supplementary Drawings exhibiting results obtained by borings, which may afford data to the Contractor, can also be seen at that office.

The Contractor's bond will be 10 per cent. of the amount of his bid. The right is reserved to reject any and all bids.

SAMUEL REA,
Vice-President.

March 20th, 1907. 12-1t

## BRICK PAVING.

Ashland, Ky.

Bids will be opened on April 17, 1907, Ashland, Ky., for 30,000 sq. yds. of brick pavement on concrete foundation and 19,000 lin. ft. concrete curb and gutter. For specifications, etc., apply to

J. W. BOSLEY,
12-3t City Engineer, Ashland, Ky.

MUNICIPAL CIVIL SERVICE COMMISSION,
299 Broadway.
New York, March 11, 1907.

Public notice is hereby given that applications will be received from Monday, March 11, until 4 P. M., Wednesday, April 24, 1907, for the position of Assistant Engineer in Charge of Section, Board of Water Supply. The examination will be held on Wednesday, May 8, 1907, at 10 A. M.

Appointments will be made for work outside of the City, and certification will be made to the Board of Water Supply only.

The examination is open to all citizens of the United States.

The salary is $2,400 per annum and over.

Ten years' experience is necessary. Graduation from a technical school of recognized standing will count as two years' experience. A candidate must show at least two years of experience in charge of work or in a position in which he had some authority or responsibility.

Statements of such examination will be subject to publication, and must be furnished to the Board of Water Supply. In submitting statement of experience, a candidate must show just what his connection has been with each piece of work, and just what measure of responsibility rested upon him.

The minimum age is 28 years.

For scope of examination and further information, apply to the Secretary.

FRANK A. SPENCER,
12-5t Secretary.

Department [illegible] Public Works,
Bureau of [illegible] ration,
Office [illegible] City Hall,
Philadelphia, [illegible] arch 7, 1907.

Sealed proposals, endorsed "Proposals for Coal Handling Machinery," and addressed to the undersigned, at the office mentioned, will be received until 12 o'clock, noon, on March 28, 1907, for Contract No. 109.—Coal Handling Machinery for [illegible]dale Pumping Station.

Specifications, drawings, blank forms upon which bids must be made, can be obtained from the Chief [illegible]neer of the Bureau of Filtration, Room [illegible] City Hall, to whom all communications should be addressed.

No bid will be considered unless accompanied by a certificate from the City Solicitor that the provisions of an ordinance requiring proposal bonds when the bids exceed in amount five hundred dollars, approved May 25, 1860 (p. 81, West), have been complied with.

The Director reserves to himself the right to reject any or all bids, as he may deem best for the interests of the city.

JOHN R. HAWKHAWAY,
12-1t Director.

Municipal Civil Service Commission,
299 Broadway,
New York, March 13, 1907.

Public notice is hereby given that applications will be received from Wednesday, March 13, until 4 P. M., Monday, May 13, 1907, for the position of Topographical Draughtsman. The examination will be held on Wednesday, May 29, 1907, at 10 A. M.

The examination is open to all citizens of the United States.

Vacancies exist in the Board of Water Supply.

Certification will be made for appointment at $1,200 per annum only.

For scope of examination and further information, apply to the Secretary.

FRANK A. SPENCER,
12-8t Secretary.

DEPARTMENT OF THE INTERIOR, UNITED STATES RECLAMATION SERVICE, Washington, D. C., March 12, 1907.—Sealed proposals will be received at the office of the United States Reclamation Service, Montrose, Colorado, until 3 o'clock p. m., April 15, 1907, for furnishing 30,000 barrels, more or less, of Portland cement, f. o. b. cars at the manufacturer's shipping point. Particulars may be obtained by application to the Chief Engineer of the United States Reclamation Service, Washington, D. C.; the Supervising Engineer, Provo, Utah, or the Engineer, Montrose, Colorado. J. R. GARFIELD, Secretary. 12-4t

OFFICE, COMMISSIONERS, District of Columbia, Washington, D. C., March 12, 1907.—Sealed proposals will be received at this office until 12 o'clock, noon, April 12, 1907, for constructing sewers in the District of Columbia. Forms, specifications and necessary information may be obtained at Room 43, District Building, Washington, D. C. HENRY B. F. MACFARLAND, HENRY L. WEST, JOHN BIDDLE, Commissioners, D. C. 12-2t

PROPOSALS FOR CHESS WAGONS.—Washington Barracks, D. C., March 13, 1907.—Sealed proposals for furnishing and delivering Chess Wagons for pontoon trains, will be received here until 12 M., April 13, 1907, and then publicly opened. Information furnished on application. E. EVELETH WINSLOW, Major, Engrs. 12-1t 14-1t

U. S. ENGINEER OFFICE, Army Bldg., New York City, March 21, 1907.—Sealed proposals for building a Pile Dock at Fort Wadsworth, N. Y., will be received at this office until 12 M., April 8, 1907, and then publicly opened. Information furnished on application. W. L. MARSHALL, Lieut.-Col., Corps Engrs. 12-2t

## SITUATIONS OPEN

FOREMAN FOR MACHINE SHOP, doing general machine work and making a specialty of cranes. Must be able to develop full capacity of machines, technical education preferred, but not as essential as experience, and ability, executive and mechanical. Opportunities for advancement. State fully, experience, references, salary expected, etc. Address "G. B. 12," Engineering News, New York. 12-1t

WANTED—At once, first-class draftsman with at least five years' experience on mill construction. Must be rapid and accurate workman. Permanent position for right man. State references, age and salary required. Address "F. B. 12," Engineering News, New York. 12-2t

WANTED—An engineer experienced in the inspection of bridge material, for the Toledo district, to act from time to time. State experience and rate per diem desired. Address "O. C. 11," Engineering News, New York. 12-1t

WANTED—By New York building contractor, superintendent of construction for mill construction; foreman carpenter used to heavy framing, and superintendent of reinforced concrete work. Answer fully, giving experience in detail and wages expected. Address "G. B. 12," Engineering News, New York. 12-1t